



We have a plan for
OUR NEXT LA[®].

2020 Long Range Transportation Plan



Metro[®]



Conceptual Illustration of Plan Elements

*By LA, we mean all 88 cities, unincorporated areas and hundreds of neighborhoods, in LA County.



We have a Plan
for a future
where we spend
less time in traffic,
and less of us
drive alone.

OUR NEXT LA*
provides a
detailed roadmap
for the journey.

Improving mobility is complicated.

That's why our plan weaves efforts across four priorities:

We envision **better transit**, with seamless trips for riders travelling across LA to learn, work or play.

Our vision is **less congestion**, where traffic flows more freely and travel times are more certain.



We will team up to make ***complete streets***, which are safer and more accessible for everyone.

We will increase ***access to opportunity*** to better connect everyone to what they need most.





All these solutions work together,
but we cannot achieve them alone.
We need every Angeleno to partner
with us in this effort.



*Together, we can
make real change.*



Letter from the CEO

Dear Friends,

The Long Range Transportation Plan (LRTP) provides the funding plan and bold policies needed to move us forward to a future LA County that is environmentally and economically sustainable, while continuing to reduce congestion. We are still learning from the current pandemic, but the need for specific long-term and near-term action plans has never been more apparent.

We must seize this opportunity to pursue a more sustainable future by taking steps now to manage the capacity and improve the effectiveness of our transportation system. Metro's LRTP details how Metro will work toward elevating the quality of our services and the reach of our transportation system, to make them better for everyone.

The benefits of improved mobility are greater access to opportunities for all, including jobs, education, housing and health care – essential elements for a higher quality of life. The responsibility for improving mobility in our region is at the core of Metro's 30-year LRTP, as is our commitment to improving equity through these efforts.

The LRTP provides a balanced, comprehensive approach by considering the mobility needs of everyone in LA County, and matches those access needs with Metro's expected resources to transform our transportation future. As Metro continues to implement the largest transportation expansion program in the country – thanks to Measure M – we also face the need to improve the quality of our existing services and leverage all modes in our system for more reliable, convenient and safe travel anywhere in the county.

Southern California's transportation challenges require bold leadership and action. Metro's LRTP establishes unprecedented levels of commitment to mobility improvement and innovative approaches to address our current and future needs. Solutions for complex problems require a collaborative approach from everyone in the region, including each of you. Please consider the LRTP an invitation to everyone in LA County to join us in moving toward a better mobility future.

Sincerely,



Phillip A. Washington
Chief Executive Officer



What is COVID-19 teaching us?

In March 2020, as the LRTP was being prepared for public release, the United States went into quarantine in response to the COVID-19 pandemic. The pandemic has reshaped all aspects of our lives, including how we work and travel, but the long-term impacts are unknown. Future updates to the LRTP and the forthcoming Short Range Transportation Plan (SRTP) will explore some of the current uncertainties, including:

Financial

Metro will continue to prioritize financial stability throughout and beyond the pandemic. COVID-19 brought a reduction in sales tax receipts and fare revenues; however, Metro remains committed to the safety of our drivers and riders. As of June 2020, Metro estimated a \$1.8 billion gap in funding from combined decreases in sales tax, fare revenue, and toll revenue, as well as increased operating expenses, but is also anticipating more than \$1 billion in financial support from the federal government through the CARES Act for LA County. Though it is still unknown how long the pandemic will impact the operations of Metro and the economy as a whole, Metro is continuously seeking innovative ideas, operational efficiencies and value engineering to improve our financial stability.

Travel Behavior

While the LRTP recognizes that there are major challenges facing our region, such as climate change, a housing crisis and congestion, the pandemic presents a unique opportunity to reposition our priorities and future actions. The pandemic has shown us how significant change can also result in potential benefits, when we look at reduced traffic. COVID-19 forced companies to re-examine remote working as a functional, healthy alternative in many industries. Continuing to promote telecommuting and/or other flexible transportation solutions will help sustain the congestion reduction and air quality benefits we are currently experiencing.

Operational

Metro's transit system saw an immediate reduction in ridership at the onset of the pandemic and the Stay At Home orders. When the Stay At Home restrictions began in March 2020, Metro deployed operational changes, such as providing a modified Sunday schedule to respond to reduced ridership, adding 60-foot buses for more capacity, increased cleaning and sanitizing of vehicles at the start and end of every revenue service, and introducing 20-minute headways during evening hours on Metro's rail system. By Summer 2020, Metro returned to roughly 50% of its previous ridership, and plans a phased return to full transit operations. However, the long-term impacts of the pandemic will continue to evolve.

While the pandemic has brought immediate changes and will have some unknown lasting impacts, the LRTP is a 30-year plan with a broad vision and strategies that are flexible and responsive to future challenges facing the region. The LRTP is a living document that will be amended to include any Board adopted recovery initiatives, as well as any financial forecast updates. Once adopted, Metro will look to a more detailed snapshot of the next decade with an SRTP focused on the immediate challenges for LA County.



better transit

p26

less congestion

p40

complete streets

p54

**access to
opportunity**

p64

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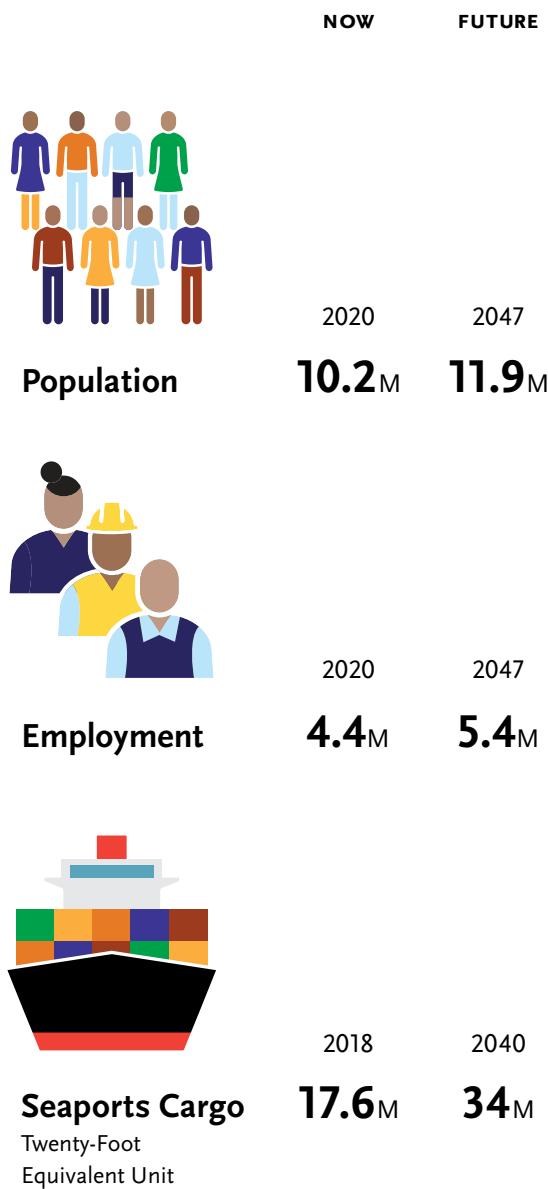
We must respond to the challenges of today *and* tomorrow.

In 2020, LA County is at a pivotal point in its history. We have made great strides in economic development and community revitalization, welcomed new sports teams and stadiums, and attracted the 2028 Olympics and other major events. However, our region faces many challenges in the years ahead, including reducing roadway congestion, increasing transit ridership, adapting to and mitigating the impacts of a changing climate, tackling the housing crisis and improving quality of life in our communities. Furthermore, recent events have highlighted the significant regional impact that unforeseen events, such as the COVID-19 pandemic, can have on our regional transportation system, economy and financial outlook. Metro will respond to this and any future crisis to prioritize public health and safety, while implementing lessons learned to continually provide better mobility with less congestion.

One thing is certain: a reliable, high-quality transportation system is crucial to LA County's economic recovery, continued prosperity and quality of life. The challenge of efficiently moving people and goods takes on particular significance in LA County, given its vast geographic scale and longstanding association with the automobile. Few issues will be more important in shaping our region's future and sustaining its incredible economic and social promise than our collective ability to marshal the resources and the political will to implement transportation solutions that successfully meet LA County's mobility needs, now and in the future.

Metro's mission is to provide a world-class transportation system that enhances quality of life for all who live, work and play within LA County (Vision 2028 Strategic Plan). As its Regional Transportation Planning Agency, Metro has the unique opportunity and responsibility to evolve the LA County transportation system to better serve its residents and visitors, and to maximize economic, mobility, safety, environmental and quality of life benefits.

Figure 1
LA County Projected Regional Growth



LA County at a Glance

LA County is home to more than
10 million people
 – the most populous county in the United States.

Metro operates the
3rd largest transit system
 in the nation, with more than
1.2 million daily boardings.*

LA County's transit providers operate
over 7,000 buses
 and serve approximately
1.6 million daily
bus passengers.*

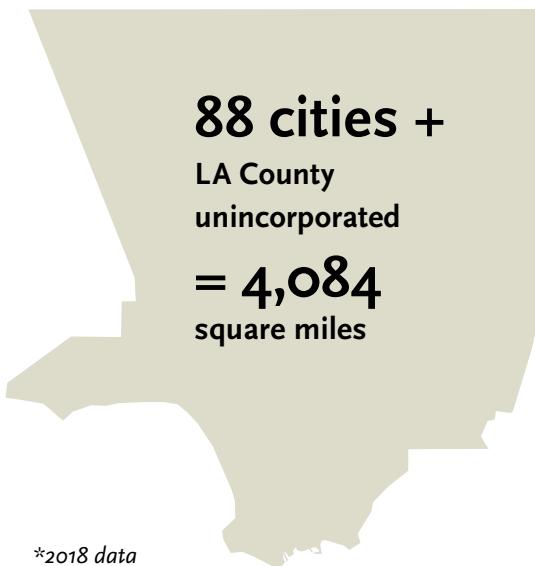
Metro's **1,433** square-mile transit
 service area fits the combined land areas of:

- Boston
- Dallas
- Denver
- New Orleans
- New York City
- Philadelphia
- Portland
- San Francisco
- Seattle
- and Washington DC

In addition to Metro,
16 municipal bus operators
 and **42 local operators**
 serve LA County residents.

Metro Rail and Metrolink trains carry over
340,000 daily passengers
 on **300 miles of rail**
 in LA County*.

LA County has close to **22,000 miles**
of highways, arterials, and
local roadways.



Therefore, let us be bold.

To that end, this Long Range Transportation Plan (2020 LRTP) will outline what Metro is doing currently and what Metro must do for LA County. Current challenges present great opportunities for Metro to take bold action and help achieve our vision for the region.

A Growing County

LA County is home to many of the nation's most congested highway corridors. Its population is expected to grow by approximately 1.7 million by 2047, increasing the number of people and volume of goods traveling on an already strained transportation network. Furthermore, while LA County is fortunate to have dedicated local funding sources, system needs still exceed available financial resources, and Metro must assess our priorities and determine what is most essential.

Changing Mobility Needs and Preferences

Our transportation system must remain resilient to evolving demographic and consumer demands, changes to the delivery of goods and services, and other unforeseen challenges that lie ahead. For example, as the population ages, older people have different needs for access than younger people, while younger people tend to have different expectations about the use of technology for their transportation choices.

Technological Change

Over the coming decades, new technologies will change the way we access goods and services, reshaping our mobility landscape, and affecting our travel preferences and expectations. For example, the widely anticipated advent of connected and autonomous vehicle technology presents possibilities for safer, more efficient vehicle travel, but raises equity concerns and could exacerbate dependency on auto travel if not properly regulated. Metro is well positioned to harness the power of private sector technology innovations to enhance customer experience by offering new mobility services, integrating and optimizing the design of vehicles and infrastructure, and increasing overall system efficiency to better serve the mobility needs of all users.



Equitable Access to Opportunity

Disparities in transportation access, mobility, economic prosperity, health, safety and environmental quality persist across racial and socioeconomic lines. Historically, transportation policies and investments in LA County have prioritized single-occupant vehicle (SOV) travel over more affordable, high-quality mobility alternatives. Furthermore, consistently rising housing costs are pushing many workers farther away from their jobs, imposing added strains on the transportation system and affecting quality of life for those impacted. The result is an inequitable transportation system that exacerbates the divide between those who have the access and means to drive and those who do not, while providing inadequate options for both groups. The transportation system must provide access to safe, reliable and affordable travel options to those who need it most. Historical decision making has resulted in the current disparities; there is an opportunity now for Metro to coordinate investments in the communities with the greatest needs.

Adapting to a Changing Environment

Southern California is continuing to face the threats of a changing climate, including increasingly frequent and severe fires, mudslides, rising urban temperatures, and the associated impacts on the public health and livelihood of our residents. California is a national leader in addressing climate change; however, emissions from the transportation sector are still a major source of greenhouse gas (GHG) emissions (nearly 40%). Metro must lead LA County in reducing GHGs, through programs to electrify our bus fleet and promote low carbon transportation options. Furthermore, we must improve the sustainability and resiliency of our transportation system, through active asset management, lifecycle cost analysis for transportation projects and proactive planning for severe climate events.

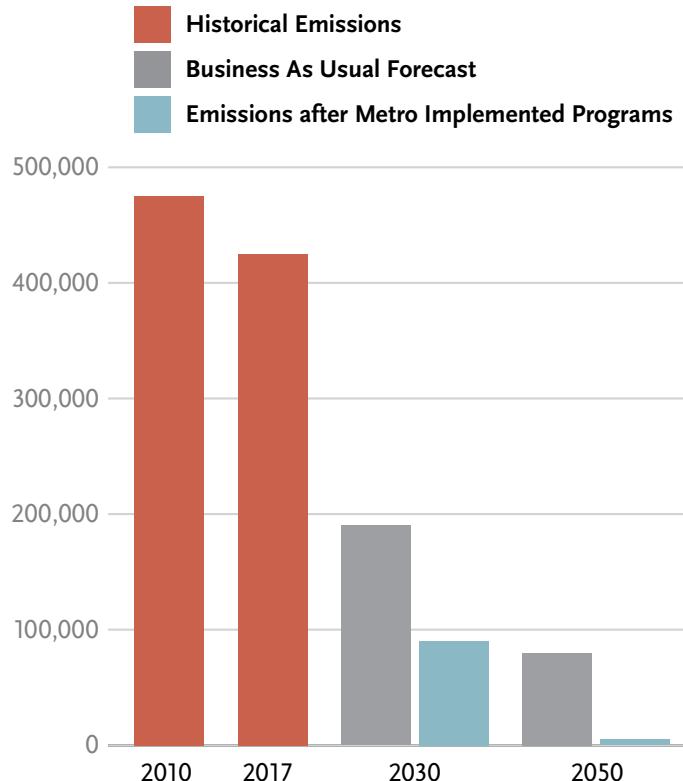
Metro commits to reducing our agency greenhouse gas emissions:

- > by 79% (relative to 2017 levels) by 2030
- > by 100% (i.e., zero emissions) by 2050



Figure 2
Emissions from Metro Operations

Metric tons of carbon dioxide equivalent



Source: Climate Action and Adaptation Plan (2017)

Metro will lead the way.

Over the coming decades, Metro will be faced with numerous, complex decisions about how to address these challenges. Significant investments are needed to maintain our aging roadway and transit systems, while managing and modernizing the system to prioritize safe and reliable transportation services. The 2020 LRTP details how Metro plans, builds, manages, and maintains LA County's transportation system, and how we partner to deliver on our promise to the residents and visitors to the region.

How We Plan and Build

Metro is the planner, designer and builder of Southern California's most expansive public transit network. Bolstered by voter-approved ballot measures, Metro has constructed roughly 130 miles of fixed-guideway transit in the past 40 years. The 2020 LRTP will add more than 100 miles over the next 30 years, the most aggressive transit expansion plan in the nation. Beyond transit, Metro will invest in arterial and freeway projects to reduce congestion, such as the I-5 North Capacity Enhancements project, and bicycle and pedestrian projects to provide alternative transportation modes, such as the LA River Path and Active Transportation Rail to Rail Corridor. Through these investments, Metro will enhance regional mobility, support economic recovery and promote sustainability through green construction practices.

Figure 3

LA COUNTY FIXED GUIDEWAYS: 1980–PRESENT

1980



2009



How We Manage

In many cases, it is not possible to build the additional capacity necessary to address the constraints on the transportation system. A functioning highway network is an essential component of an effective transportation system. There is limited space to expand roads, and while fixing bottlenecks has alleviated congestion in places, adding more general-purpose freeway lanes is often an expensive and disruptive option that will not solve congestion as the county continues to grow. Therefore, Metro must ensure that the regional transportation system is managed effectively through active corridor monitoring and operations. Working with our partners, we promote policies and programs, such as congestion pricing, integrated corridor management and parking management strategies, that allow us to better utilize space to transport more people to more destinations. We will continue to build out a network of ExpressLanes to improve reliability on our freeways. Since the 2009 Long Range Transportation Plan, we have opened 96 miles

along two ExpressLanes corridors. Over the next decade, Metro will introduce an additional 210 miles of ExpressLanes on four additional corridors. We will continue to prioritize bus travel and provide dedicated space on arterial corridors, such as the Wilshire Boulevard and Flower Street bus lane projects, and work to implement the recommendations of the NextGen Bus Plan. Furthermore, we will invest in technology and promote innovative new mobility options, such as carsharing, micro mobility, mobility on demand (MOD), microtransit (Metro Micro), Mobility as a Service (MaaS), connected and autonomous vehicles and freight-focused technologies. We will assess current and new pricing models to develop a simplified, equitable, fiscally sustainable, system-wide approach to pricing while also providing better mobility and security for all users across Metro's portfolio of transportation services.

How We Maintain

In addition to building and managing, Metro is taking steps to continuously maintain and upgrade the multimodal system and enhance its quality and safety. While Metro's transit system is newer than other peer agency systems, its rehabilitation and replacement needs will continue to grow. In 2019, Metro completed the New Blue Improvements Project, which rehabilitated Metro's oldest rail line, the A Line (Blue) between Long Beach and downtown Los Angeles. Our investment plan includes over \$200 billion for operations and state of good repair, as well as \$38 billion in funding that returns to local agencies to maintain their local transportation system. Maintaining the system also includes upgrading and modernizing the system to enhance our customer experience and improve safety. Metro will continue to invest in technology, amenities, safety improvements and other system enhancements to create a world-class transportation system.

How We Partner

Metro relies on continuous coordination and meaningful partnerships with local, state and federal agencies, the private sector and all local stakeholders. These partnerships are crucial for funding and delivering projects and for coordinated planning on issues of regional significance as well as local importance. Being responsive to the diverse needs of our many stakeholders would not be possible without these essential partnerships. Metro will increase collaboration with local jurisdictions to support transit priority on local roadways, to improve first/last mile access to transit, to improve local mobility and to realize transit-oriented communities.

2020



We've built a multi-layered, responsive plan.

We collected surveys and visited communities all over the county.

Our Next LA[®] community engagement included:

- > 77 community events
- > 38 public meetings
- > 20,000 survey responses
- > 48,000 completed priority rankings

The recommendations included in the 2020 LRTP are built on a two-year outreach effort that included surveys, meetings, and engagement throughout LA County. It includes all major transit and highway projects with committed funding or partially committed funding, existing programs and policies, collaboration with our partners, and new policies and initiatives to achieve our regional goals. The financial commitments of the 2020 LRTP, including Measures M and R, provide a foundational investment with broad mobility and sustainability benefits.

These commitments were previously established in collaboration with our local partners. Metro intentionally employed an extensive bottoms-up approach with subregional partners, to ensure that Measure M was shaped by their local project priorities.

The LRTP maximizes these benefits through the addition of **expanded programs**, such as ExpressLanes, off-peak transit services and active transportation network expansion; **partnerships** to enhance transit, active travel, goods movement, and community development; and **bold policies**, such as reduced transit fares, a reimagined bus system and congestion pricing. Together, the committed capital program and these expanded programs, partnerships and policies represent a bold but achievable vision for our future system (figure 4).

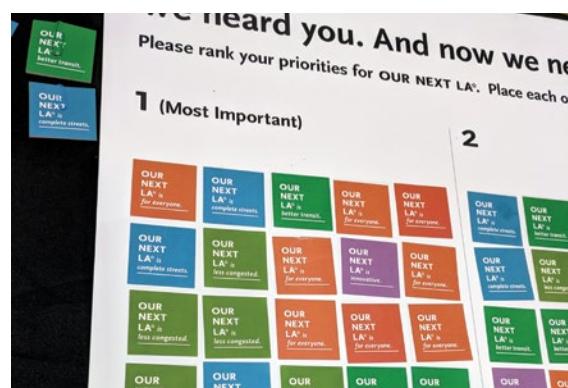
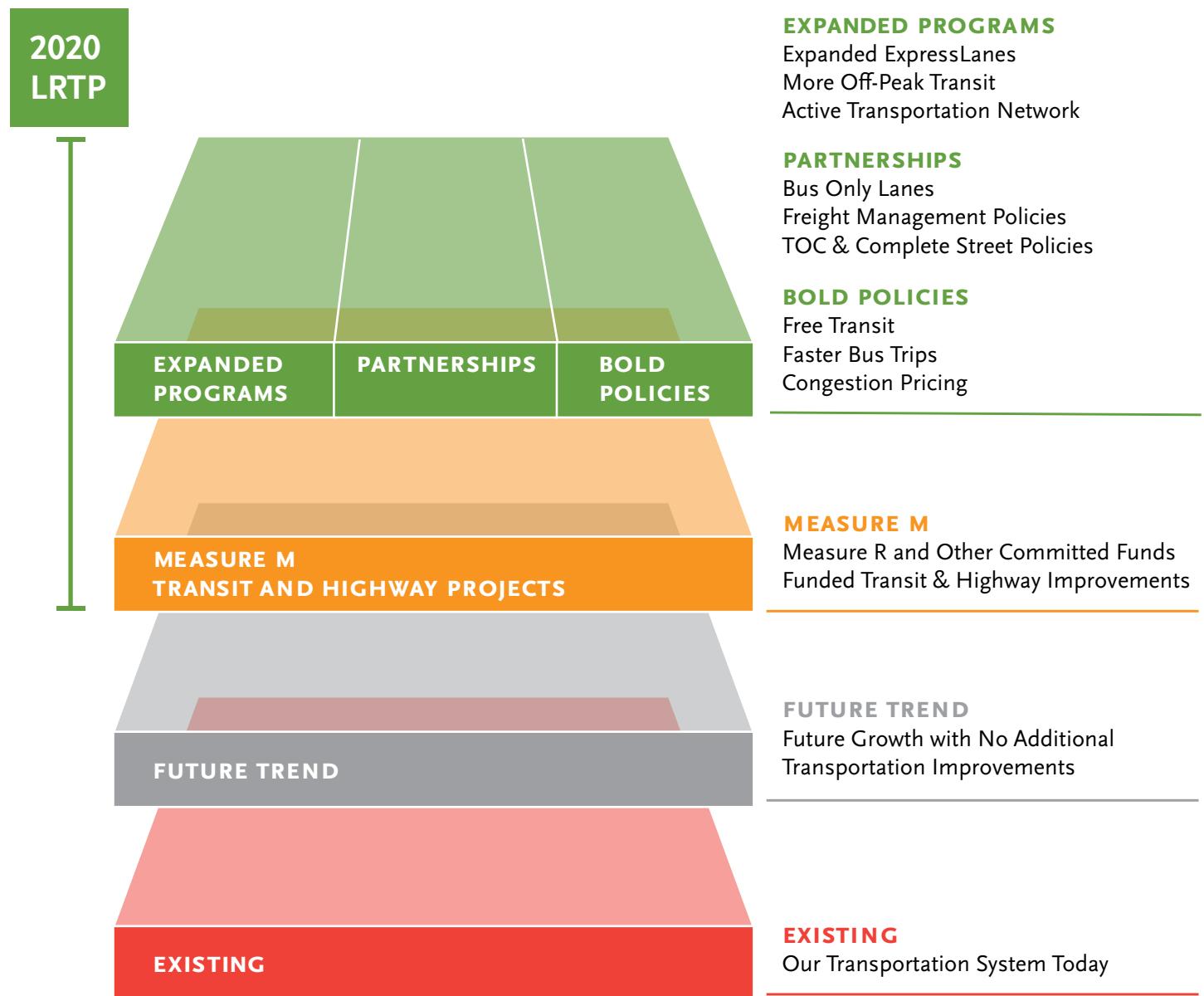


Figure 4

Elements of the 2020 LRTP

Benefits at a Glance

The 2020 Long Range Transportation Plan has the potential to deliver significant mobility benefits to the region through the major capital projects, programs and bold policies.

> The Measure M investment plan, on its own, will **dramatically expand regional access to high-quality travel options**. After implementation, 21% of county residents and 36% of jobs will be a 10-minute walk from high-quality rail or bus rapid transit options, up from only 8% of residents and 16% of jobs at present day.

> Metro's other actions, including current, expanded and new **bold initiatives**, can complement the current capital investment plan and help the region achieve the dramatic changes that we need, such as a potential **81% increase in daily transit trips**, a **31% decrease in traffic delay** and a **19% decrease in greenhouse gas emissions**.

Figure 5

Benefits of the 2020 LRTP

Future Trend (2047)
With Measure M Alone (2047)
With 2020 LRTP (2047)

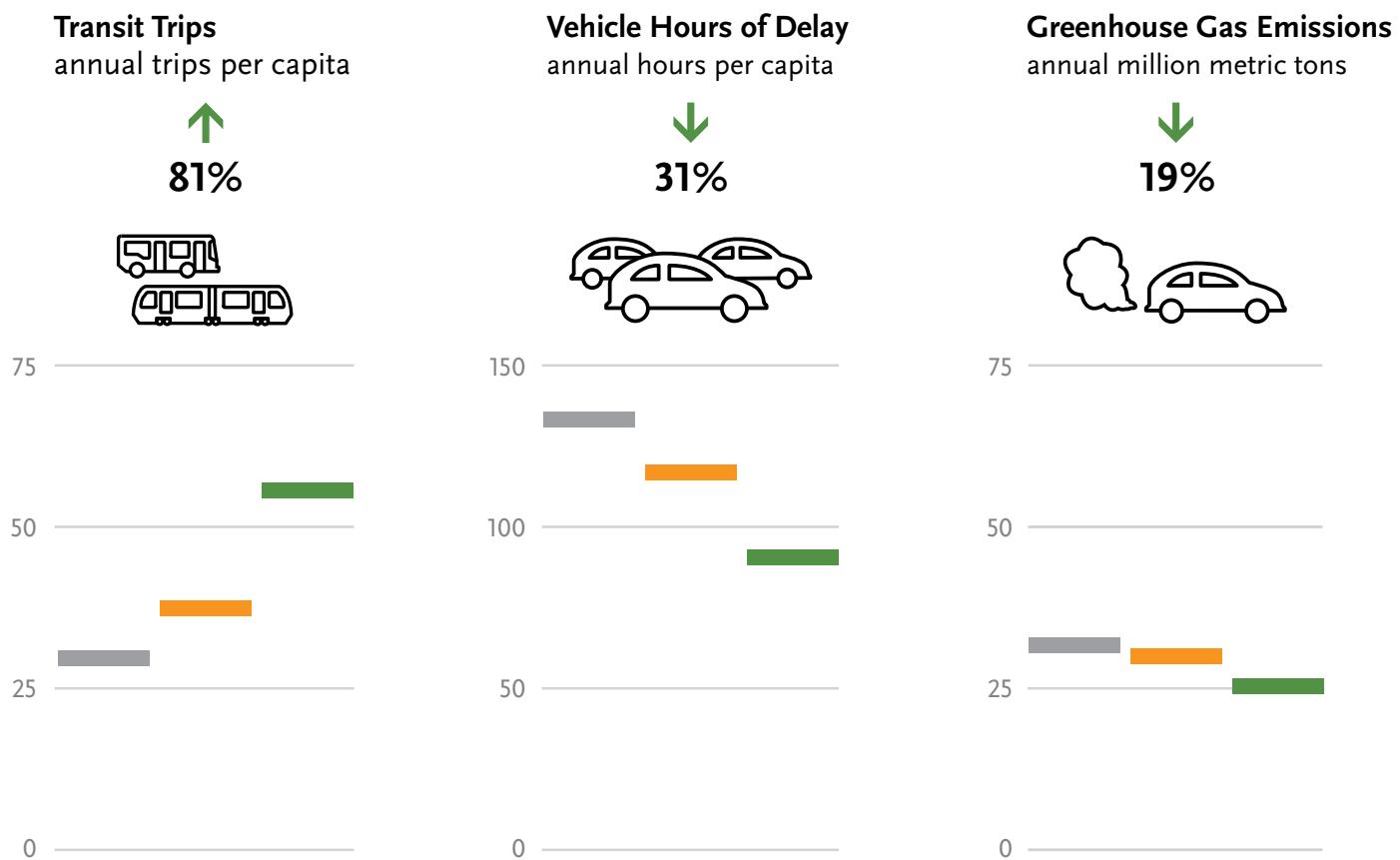
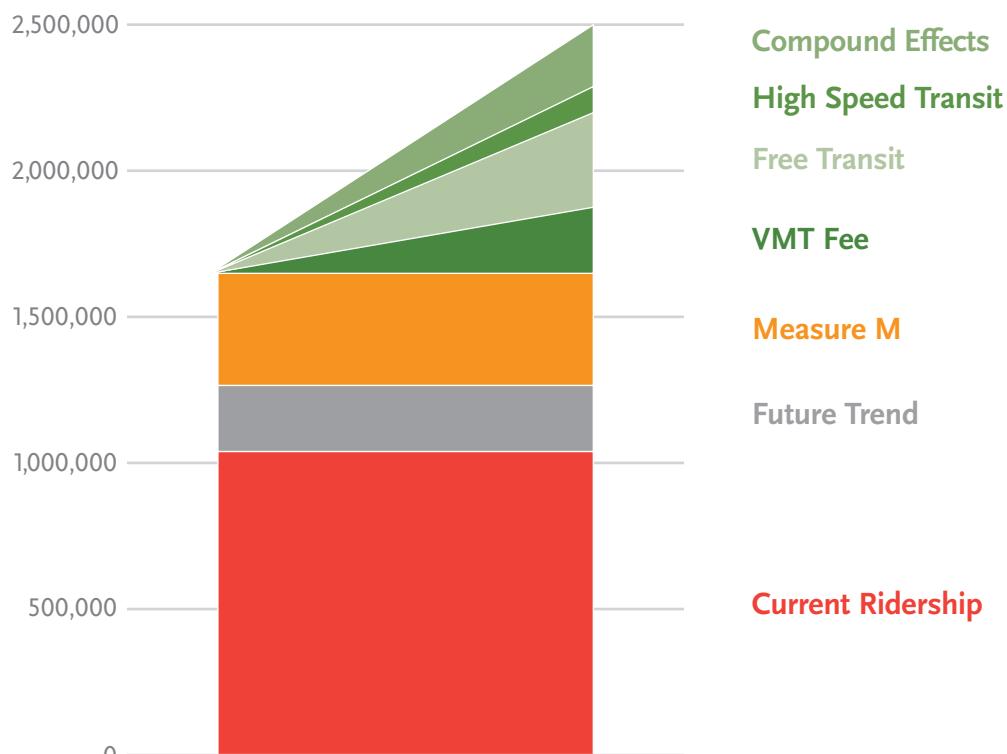


Figure 6

Potential Increase in Daily Transit Trips



Beyond the Measure M transit expansion, Metro can gain transit ridership with:

1. Faster Transit (Increased fast/frequent transit): +7%
2. Reduced Transit Fares (Reduced fare/free transit): +25%
3. Road Charges (Mileage-based/VMT fees): +18%

These scenario tests represent policy opportunities, but do not reflect specific policy directives. Board action will be required for any policy action or implementation.

Compound Effects

High Speed Transit

Free Transit

VMT Fee

Measure M

Future Trend

Current Ridership

Scenario modeling tested the impacts of these strategies above and beyond the transit expansion commitments in this plan.

- > Increases in frequency and increased speeds on 40 most popular bus routes could result in a 7% increase in ridership.
- > Reducing transit fares can increase ridership; a fully subsidized transit trip for all riders may increase ridership up to 25%.
- > For mileage-based fees, each one cent per mile increase can result in roughly a 1% increase in transit ridership. A 20 cent vehicle miles traveled (VMT) fee may result in a 18% increase in transit ridership.
- > Applied together, these strategies have compounding benefits and generate an even larger increase in ridership.

Metro's Plan guides our priorities.

As outlined in the *Vision 2028 Strategic Plan*, Metro's visionary outcome is to double the share of transportation modes other than solo driving. The Plan details five goals:

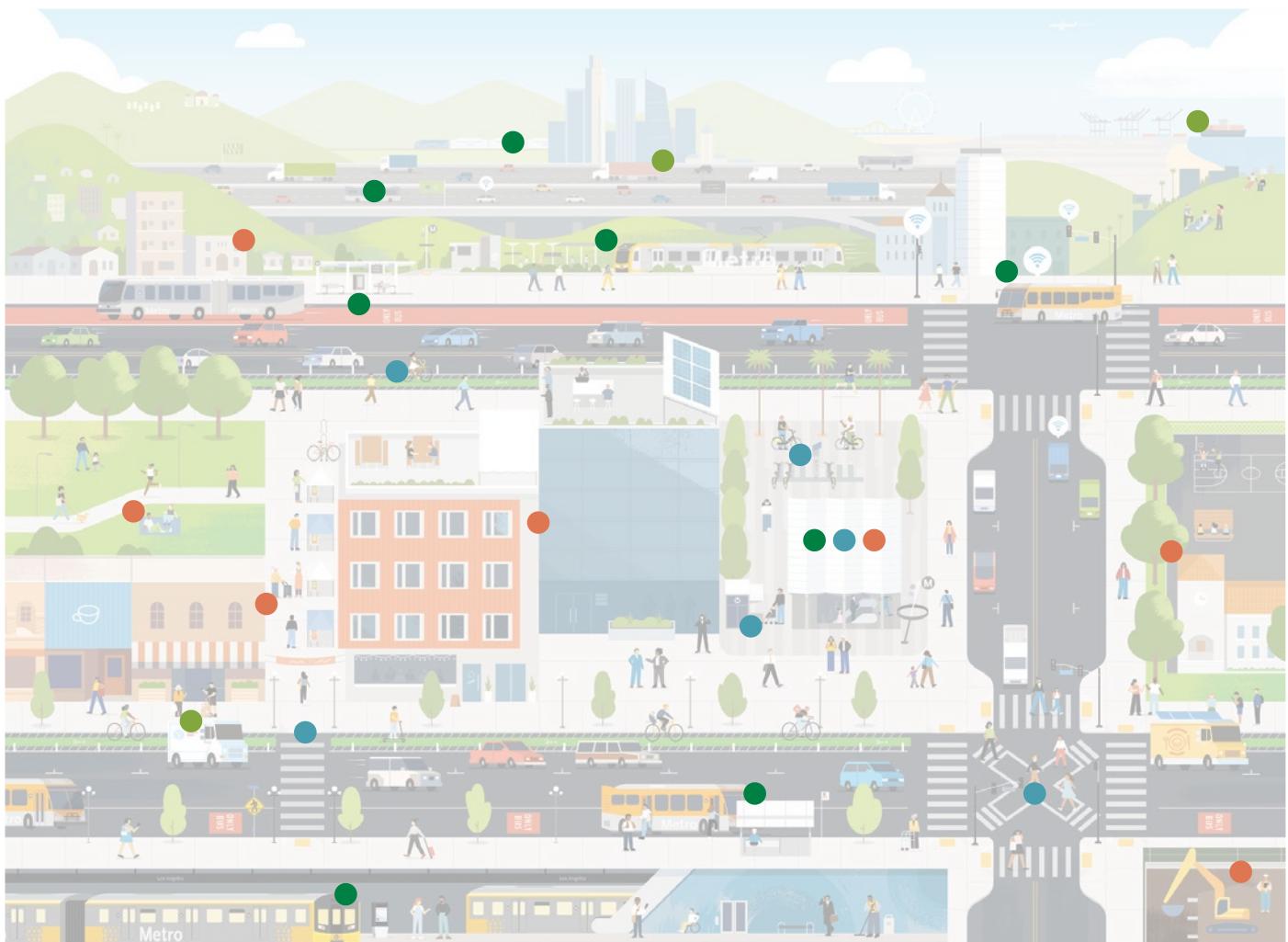
- ❶ Provide high-quality mobility options that enable people to spend less time traveling
- ❷ Deliver outstanding trip experiences for all users of the transportation system
- ❸ Enhance communities and lives through mobility and access to opportunity
- ❹ Transform LA County through regional collaboration and national leadership
- ❺ Provide responsive, accountable, and trustworthy governance within the Metro organization

The 2020 LRTP lays out a future roadmap for bringing about a more mobile, resilient and vibrant future for LA County. Through extensive public outreach, Metro has distilled the region's desires into four priority areas:

- Better Transit
- Less Congestion
- Complete Streets
- Access to Opportunity

The recommended steps in this plan, the LRTP's strategies and actions, are organized by these four priority areas.

Embedded in the priority areas are **equity** to ensure every resident has the affordable transportation choices that work for their needs, and **sustainability** to ensure a bright future for generations to come. Together, we can create Our Next LA*.



Conceptual Illustration of Plan Elements

Figure 7

Metro's Framework for Improving Mobility in LA County

We're guided by our *Strategic Plan* goals.



We're creating

① Faster Travel Options ② Better Trips ③ Thriving Communities

Better Transit

Providing more transit options with improved quality and service

Transit Projects

Bus Improvements

New Mobility Options

Less Congestion

Managing the transportation system to reduce the amount of time people spend in traffic

Roadway Improvements

Congestion Management

Goods Movement

Complete Streets

Making streets and sidewalks safe and convenient for everyone, to support healthy neighborhoods

Bike and Pedestrian Projects

Local Street Improvements

Station and Stop Access Enhancements

Access to Opportunity

Investing in communities to expand access to jobs, housing and mobility options

Workforce Initiatives

Support for Local Businesses

Transit Oriented Communities



We're committed to

④ Leadership ⑤ Accountability



Collaboration



Continuous Improvement



Customer Focus



Innovation



Inspired and Inclusive Workforce



Safety



Customer Experience Plan



COVID-19 Recovery Plan

We're intentionally focused on

eliminating racial and socioeconomic disparities and advancing sustainable practices in everything we do.



Equity



Sustainability



Equity Plan



Moving Beyond Sustainability Plan



**OUR
NEXT
LA^{*} *is***
better transit.

Better transit means faster, more frequent, secure and reliable public transportation, with more options and better customer experience. We must create a world-class transit system that is competitive with driving a private vehicle and that works for riders with different trip purposes and destinations. Better transit also means an integrated and seamless trip experience on rail, bus and new mobility transportation options.



We're investing in more transit, to serve more people.

Over the **30-year period**, Metro will invest more than **\$80 billion** to improve, expand and upgrade LA County's extensive public transit system, including over \$68 billion on major transit projects.

This includes the construction or improvement of **22 transit corridors** and the addition of **106 miles of fixed guideway transit.**

In total, the **2020 LRTP** will expand the Metro Rail network to over **200 stations** covering nearly **240 miles.**

Our Commitment to Safety

Providing a safe, secure, clean, and comfortable experience on transit is perhaps the most critical priority for the operations of Metro's transit system. Recent events have put more of an emphasis on these issues, and Metro must maintain a balanced and coordinated effort to ensure that individuals are secure and feel safe riding transit, while at the same time making sure that we meet our commitments as a public agency that provides an essential public service.

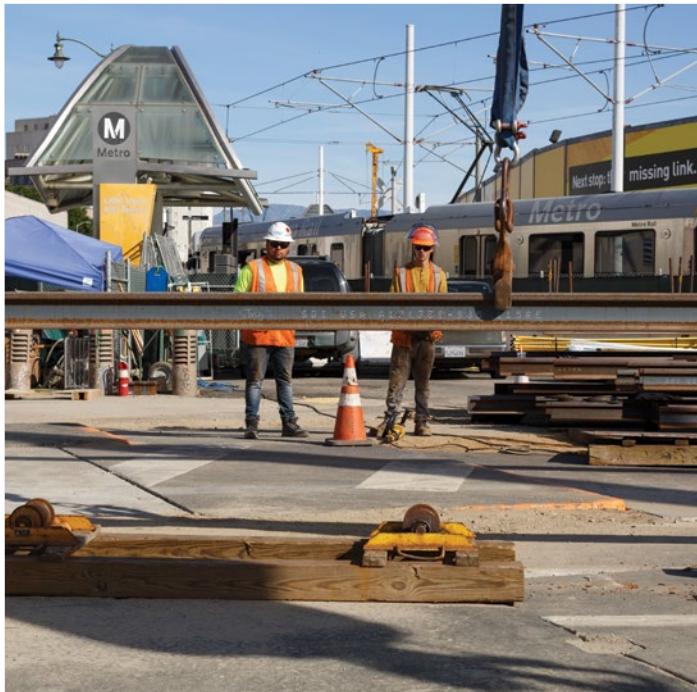
The COVID-19 pandemic has highlighted the need to provide clean spaces as well as free masks to keep passengers and drivers safe. At the same time, the number of individuals experiencing homelessness in LA County continues to increase and Metro must continue to provide compassionate responses and a public service for those with few resources.

Finally, the nationwide call for police reform has reinforced our need to examine our policing practices to ensure no individuals or population groups are disproportionately targeted, while at the same time ensuring the safety of our passengers and drivers.

Metro Rail Expansion

Construction is underway on several rail corridors. The Crenshaw/LAX Transit Project light rail line, expected to open in 2021, will extend from the E Line (Expo) to the C Line (Green), with a station at the Los Angeles International Airport's Automated People Mover. The Regional Connector Transit Project, scheduled to open in 2022, will connect the L Line (Gold) to the A Line (Blue) and E Line (Expo) to provide more stations in downtown Los Angeles and greater connectivity. The Westside D Line (Purple) subway extension along Wilshire Boulevard is under construction in three phases, with Section 1 from Western to La Cienega scheduled to open in 2023.

Other near-term projects include the Metro Gold Line Foothill Extension to Claremont, which recently broke ground, the East San Fernando Valley Light Rail Project, the West Santa Ana Branch Transit Corridor, and the C Line (Green) Extension to Torrance.



Bus Rapid Transit

Bus Rapid Transit (BRT) is a high-quality bus-based transit system that delivers fast, frequent service. It does this with bus-only lanes, traffic-signal priority and high-quality stations with all-door boarding. The G Line (Orange) was extended from Canoga Park to Chatsworth in 2012 and is currently undergoing further enhancements to improve operating speeds, capacity and safety by adding grade separations on major streets, closing minor streets and providing better signal priority technology.

Other near-term projects include the North Hollywood to Pasadena BRT and North San Fernando Valley Transit Corridor (Chatsworth to North Hollywood). Additionally, Measure M included funding for to-be-determined BRT corridors. The BRT Vision and Principles Study, currently underway, will identify performance standards and design criteria for future BRT projects.



Transit Investment

Figure 8

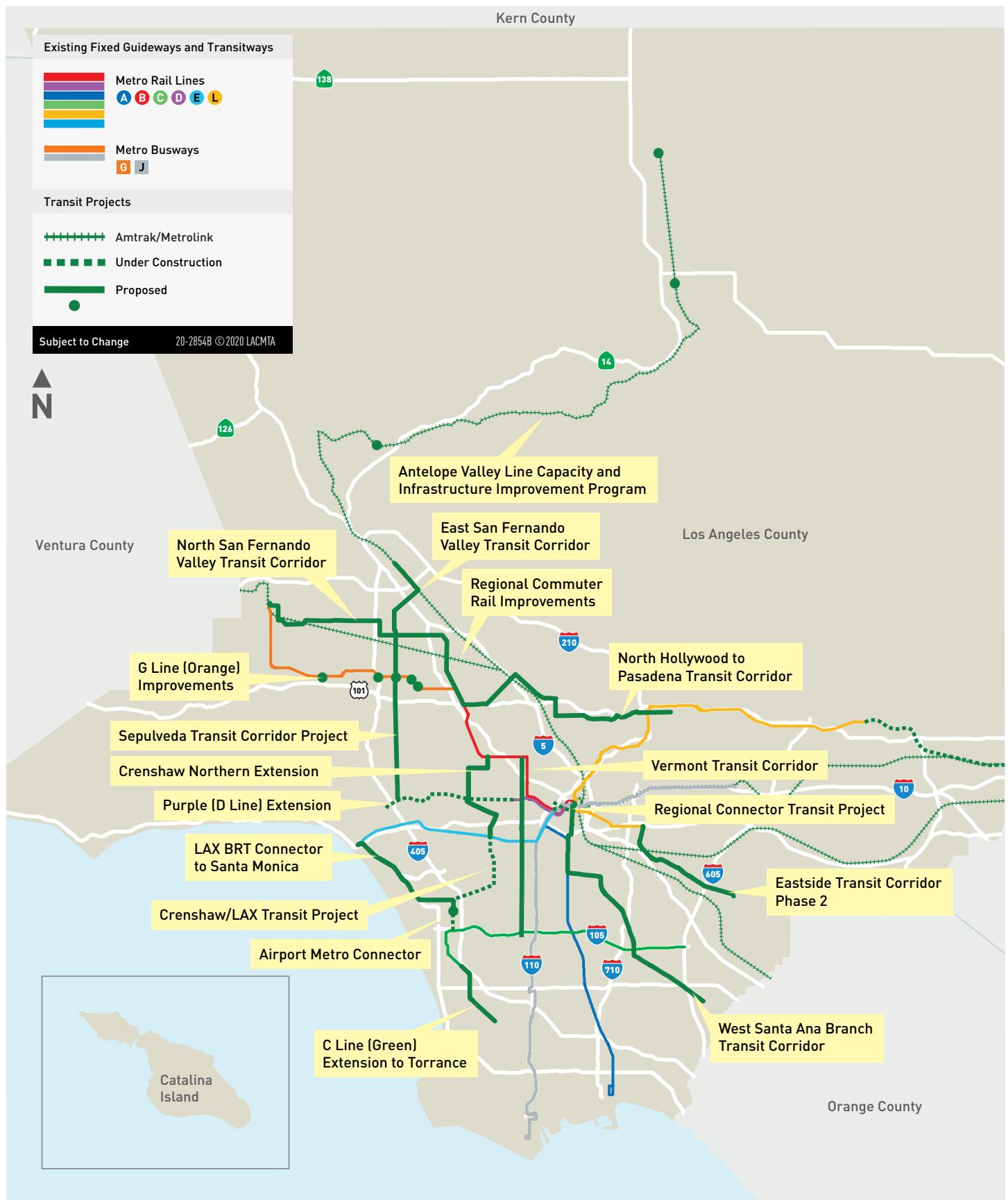
Major Transit Projects		\$ IN MILLIONS	ESTIMATED OPEN YEAR
Crenshaw/LAX Transit Project (LRT)		2,058	2021
Regional Connector Transit Project (LRT)		1,756	2022
D Line (Purple) Extension (HRT)			
Section 1 (Wilshire/Western to Wilshire/La Cienega)		2,779	2023
Section 2 (Wilshire/La Cienega to Century City/Constellation)		2,441	2026
Section 3 (Century City/Constellation to Westwood/VA Hospital)		3,224	2027
Airport Metro Connector/96th Street Station/Green Line Ext LAX		626	2024
Crenshaw/LAX Track Enhancement Project		56	2024
North Hollywood to Pasadena Transit Corridor (BRT)		315	2024
North San Fernando Valley Transit Corridor (BRT)		207	2025
G Line (Orange) Improvements		314	2025
East San Fernando Valley Light Rail Project (LRT)		1,568	2027
Gold Line Foothill Extension to Claremont (LRT)		1,571	2028
Vermont Transit Corridor		524	2028
Antelope Valley Line Capacity and Infrastructure Improvement Program		221	2028
West Santa Ana Branch Transit Corridor (LRT)			
Phase 1		1,250	2028
Phase 2		5,061	2041
C Line (Green) Extension to Torrance (LRT)		1,167	2030
Sepulveda Transit Corridor (Mode TBD)			
Phase 2 – Valley to Westside		7,685	2033
Phase 3 – Westside to LAX		10,587	2057*
Eastside Extension Phase 2 Transit Corridor (1st Alignment)		4,409	2035
Crenshaw Northern Extension (LRT)		4,744	2047
Lincoln Bl (BRT)		220	2047
SF Valley Transportation Improvements		257	2050
C Line (Green) Eastern Extension to Norwalk (LRT)		1,891	2052*
G Line (Orange) Conversion to Light Rail		4,069	2057*
Historic Downtown Streetcar		581	2057*
Eastside Extension Phase 2 Transit Corridor (2nd Alignment)		8,707	2057*
Total		68,288	

LRTP project costs may not match Measure M expenditure plan due to year of expenditure escalation and prior spending. Final mode, alignments, and station locations to be confirmed during environmental processes. Estimated open year is a three-year range.

*Includes projects through 2057, (currently planned as the horizon year of measure M beyond the LRTP)

Figure 9

PLANNED TRANSIT PROJECTS



Final alignments to be identified during environmental processes. Map includes projects to be completed prior to 2050 (horizon year of the LRTP).

Priority Area 1: Better Transit

Strategy 1.1: Expand rail transportation countywide

Since the A Line (Blue) opened in 1990, Metro has undergone a tremendous expansion of our rail transportation system, growing to the second largest rail system in the U.S. Aided by Measure R and Measure M, Metro is continuing to build out the rail network at a rapid pace. There are four rail corridors in construction currently and many more in design and planning.

ACTION	NOW	SOON	FUTURE	BUILD	MANAGE	MAINTAIN	PARTNER
1.1a. Complete Metro Rail projects in construction	●			●			
1.1b. Implement Metro Rail projects in design		●		●			
1.1c. Prioritize four “pillar” Rail projects (West Santa Ana Branch, Eastside Extension Ph. 2, C Line [Green] to Torrance, and Sepulveda Transit Corridor)		●					●
1.1d. Identify and plan future Metro rail expansion			●	●			●
1.1e. Complete Link Union Station (Link US) project		●		●			●
1.1f. Support Metrolink Southern California Optimized Rail Expansion (SCORE) Program	●						●

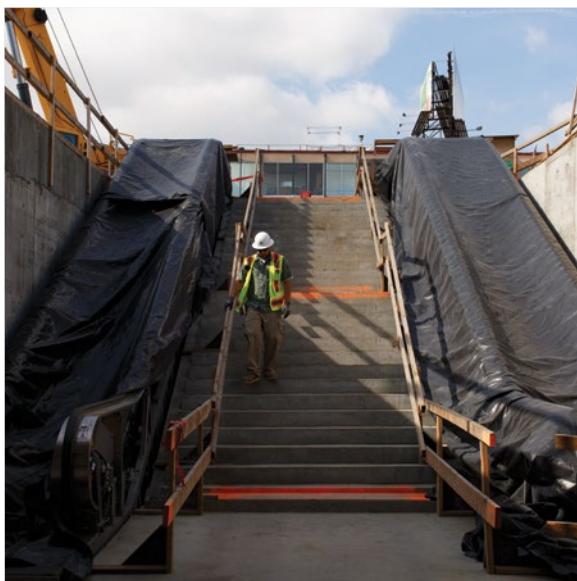
Strategy 1.2: Improve the frequency, speed and reliability of the bus and rail transit networks

Through signature efforts, including the NextGen Bus Plan and BRT Vision and Principles Study, Metro is redesigning our bus network to be faster, more frequent and reliable, as well as integrated with other LA County transit services. The first significant system update in 25 years, Metro's NextGen Bus Plan aims to reverse the recent declining ridership trend.

ACTION	NOW	SOON	FUTURE	BUILD	MANAGE	MAINTAIN	PARTNER
1.2a. Implement recommendations of the NextGen Bus Plan	●			●	●	●	●
1.2b. Improve average travel speeds for the bus network	●	●			●		●
1.2c. Implement systemwide bus all-door boarding	●	●			●		
1.2d. Implement systemwide transit signal priority for bus and rail transit	●	●			●		●
1.2e. Support complementary paratransit service	●				●		●
1.2f. Continue coordination between Metro and municipal bus operators	●						●
1.2g. Implement new Intelligent Transportation System to better match travel/transit demand and transit service		●			●		
1.2h. Implement Metro BRT projects in design		●		●			●
1.2i. Implement future BRT corridors identified in BRT Vision and Principles study			●	●			●
1.2j. Complete G Line (Orange) Improvements	●	●		●		●	●

Crenshaw/LAX Transit Project

The Crenshaw/LAX Transit Project, currently in construction, will extend from the existing E Line (Expo) at Crenshaw 8.5 miles southwest to the C Line (Green). Opening in 2021, the Crenshaw Line will add eight new stations, including one at the Automated People Mover currently under construction at the Los Angeles International Airport (LAX). Along the line, Destination Crenshaw, a 1.3-mile open-air museum will celebrate the African American culture and community of the corridor. The project will create pocket parks with culturally stamped sidewalks, lighting and landscaping improvements, business facades and public structures.



Bus-Only Lanes

In order to make transit truly competitive with driving, Metro is working with local agencies to convert key sections of curb lanes to bus-only lanes. Two recent examples of bus-only lanes include the Wilshire Boulevard and Flower Street bus lanes. Metro's 720 Rapid bus operates on dedicated curbside bus lanes along Wilshire Boulevard from the western edge of downtown Los Angeles to the eastern edge of the City of Santa Monica (excluding Beverly Hills). The Flower Street bus lane is a pilot, weekday evening rush hour (3–7pm) bus-only lane along Flower Street between 7th Street and Adams Boulevard.

NextGen Bus Plan

In 2018, Metro began the process of reimagining our bus system to better meet the needs of current and future riders. The proposed plan, recently released for public comment, proposes improvements, which would: double the number of frequent Metro bus lines; provide more than 80% of current bus riders with 15-minute or better frequency; create an all-day, every day service; ensure a one quarter-mile walk to a bus stop for 99% of current riders; and create a more comfortable and safer waiting environment. The “Transit First” approach would include capital projects that speed up buses (bus lanes and traffic signal priority, etc.), make bus stops more comfortable, expand all-door boarding and add even more frequent services, among other improvements.



Strategy 1.3: Enable easier fare payment

A convenient, integrated fare payment that is accessible to all residents is essential for a world-class transportation system. Metro is expanding payment options in partnership with regional operators for a seamless payment experience. While TAP is already integrated across many services, customers will soon be able to pay for their fare through a mobile app.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
1.3a. Integrate payment for third-party mobility services		●					●
1.3b. Expand TAP integration with all regional partners	●						●
1.3c. Develop TAP mobile app		●					●

Strategy 1.4: Enhance station areas

To deliver excellent transit experiences, Metro is committed to improving stations and surrounding areas to be safe, smart, clean and green.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
1.4a. Consistently implement Systemwide Station Design for attractive, well-integrated, sustainable, and maintainable station environments	●			●			
1.4b. Improve customer information, including the availability of real-time arrival information, wayfinding, and consistent signage	●				●		
1.4c. Increase shading and cooling at transit stations	●			●		●	●
1.4d. Improve bus shelter amenities in partnership with local jurisdictions	●			●		●	●
1.4e. Implement Metro's Supportive Transit Parking Program Master Plan	●			●			
1.4f. Optimize station safety and security, including lighting levels, spacious uncluttered station environments, and effective monitoring of station area	●				●		

Strategy 1.5: Explore new service delivery

With new and competing transportation options, Metro must embrace new forms of mobility to attract and retain riders. In partnership with Via, Metro has implemented a Mobility on Demand pilot program with free, accessible and on-demand rides. The agency will also operate its own on-demand service with Metro employees behind the wheel called Metro Micro, which will serve six service areas in 2021 with the goal of capturing short trips around high transit ridership zones and complementing the existing fixed route system.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
1.5a. Implement Mobility on Demand (MOD) partnership with Via	●						●
1.5b. Implement Metro Micro on-demand transit service	●				●		●
1.5c. Launch Mobility as a Service (MaaS) platform		●					●

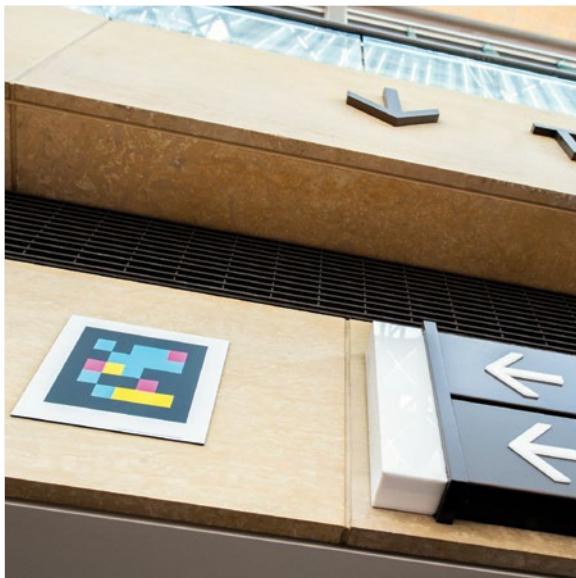
Strategy 1.6: Enhance customer experience

The new Customer Experience program goal is to minimize pain points, maximize smooth, uneventful experiences, and find opportunity for occasional surprise and delight. We are creating a system that is modern and intuitive, using design, technology and policies to address the unique needs of our customers at every stage of their journey.

ACTION	NOW	SOON	FUTURE	BUILD	MANAGE	MAINTAIN	PARTNER
1.6a. Implement practices from Transfer Design Guide	●			●	●		●
1.6b. Support passengers with disabilities, including ensuring universal accessibility of stations	●				●		●
1.6c. Develop Gender Action Plan to address unique needs of women	●				●		
1.6d. Ensure transit experience is clean and comfortable	●					●	
1.6e. Implement Facilities Assessments to maintain a state of good repair	●					●	

Accessible Wayfinding

Metro is testing wayfinding strategies for the visually impaired so they can more easily navigate the transit system. This technology, NaviLens, allows users to access arrival and departure information and descriptions of how to get to different platforms at Union Station from a mobile application. The pilot deployment of NaviLens technology has allowed visually impaired riders to feel more comfortable traveling alone and improved the experience for passengers with disabilities.



How Women Travel

Metro was the first transit agency in the nation to study and report on women's unique mobility needs. This 2019 report found that women take more Metro trips, ride public transit more often and prioritize safety more often than men. Metro is taking action on these findings by developing a Gender Action Plan to improve the rider experience for women, including rethinking communications, fare policies, station design and service hours.



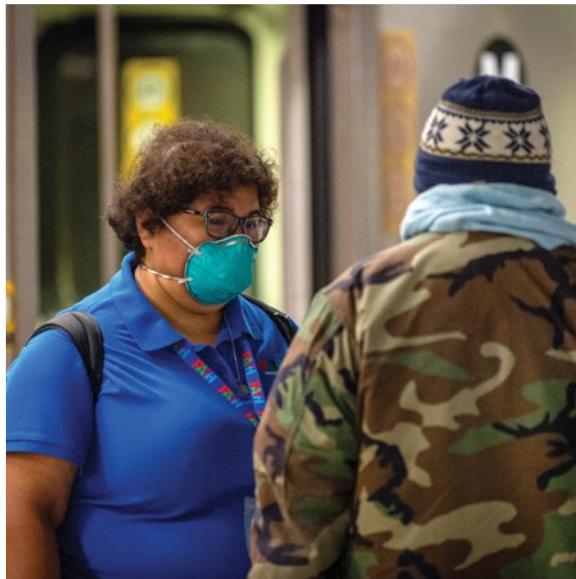
Strategy 1.7: Enhance transportation system security and build public trust

Customer safety is a top priority for Metro. We must continue to address safety concerns, while at the same time, build trust between our riders, communities and partners, public safety professionals and Metro employees.

ACTION	NOW	SOON	FUTURE	BUILD	MANAGE	MAINTAIN	PARTNER
1.7a. Introduce the Transit Homeless Action Plan 2.0	●				●		●
1.7b. Align the Multi-Agency Policing Plan to include Metro's system expansion plans	●				●		●
1.7c. Launch Metro's new and improved Sexual Harassment Plan	●				●		●
1.7d. Develop new overall security-enhancing measures for the entire system to include environmental station design	●				●		
1.7e. Update the Security & Emergency Preparedness Plan and Metro Training		●			●		
1.7f. Open and operate the Emergency Security Operations Center			●	●	●		
1.7g. Enhance Emergency Management, Continuity of Operations, and Emergency Operations Procedures to national certification levels	●						●

Transit Homeless Action Plan

In February 2017, Metro released its first Transit Homeless Action Plan that focused on improving the passenger experience through coordinated and comprehensive outreach to homeless individuals throughout Metro's transit system. The Homeless Action Plan is focused on four implementation areas including research, education, coordination, and outreach. Research is intended to help Metro understand homelessness in the transit system while education is focused on increasing understanding among Metro staff and passengers about how to respond when encountering individuals believed to be homeless. Metro is one of several stakeholders involved in the delivery of services to homeless populations in LA County; a key component of Metro's Homeless Outreach Plan is the City, County, Community (C₃) outreach teams that Metro deploys to make contact with individuals believed to be homeless and link them to services and permanent housing solutions.



Strategy 1.8: Optimize sustainable and resilient operations and maintenance of fleet, infrastructure and facilities

Better transit includes sustainable and efficient transit systems. Metro employs life cycle and efficiency considerations for buses, maintenance yards and resource acquisition.

ACTION	NOW	SOON	FUTURE	BUILD	MANAGE	MAINTAIN	PARTNER
1.8a. Implement Transit Asset Management Plan	●					●	
1.8b. Develop and implement an agency-wide Sustainable Acquisition Program	●				●		
1.8c. Integrate resource conservation, life cycle and efficiency considerations into Metro's operational and construction policies, Standard Operating Procedures (SOPs) and specifications	●					●	●
1.8d. Develop and implement materials, construction and operations-related training for Metro staff, partners and community to facilitate a culture of sustainability and resiliency	●					●	●
1.8e. Transition to zero emission buses systemwide	●	●				●	
1.8f. Modify the B Line (Red)/D Line (Purple) maintenance yard	●			●			



More transit trips mean more opportunity.

Transit improvements in the 2020 LRTP, including the expansion of Metro Rail and Bus Rapid Transit, will help add more than 1,000,000 daily transit trips, an increase of 81%. For commute trips, this has the potential to increase transit mode share for daily trips to and from work from 8.8% to 14.7%.

 Future Trend (2047)
 With 2020 LRTP (2047)

Figure 10
Daily **Transit** Trips

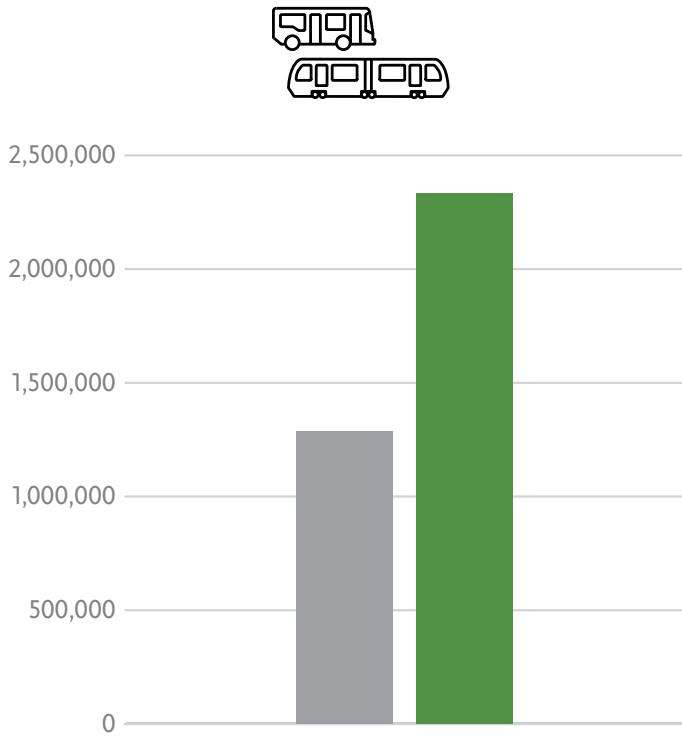
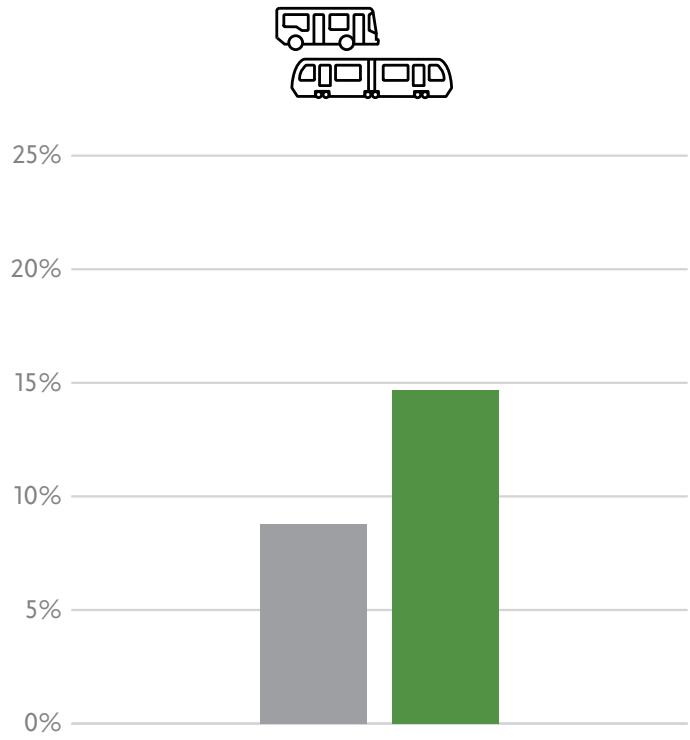


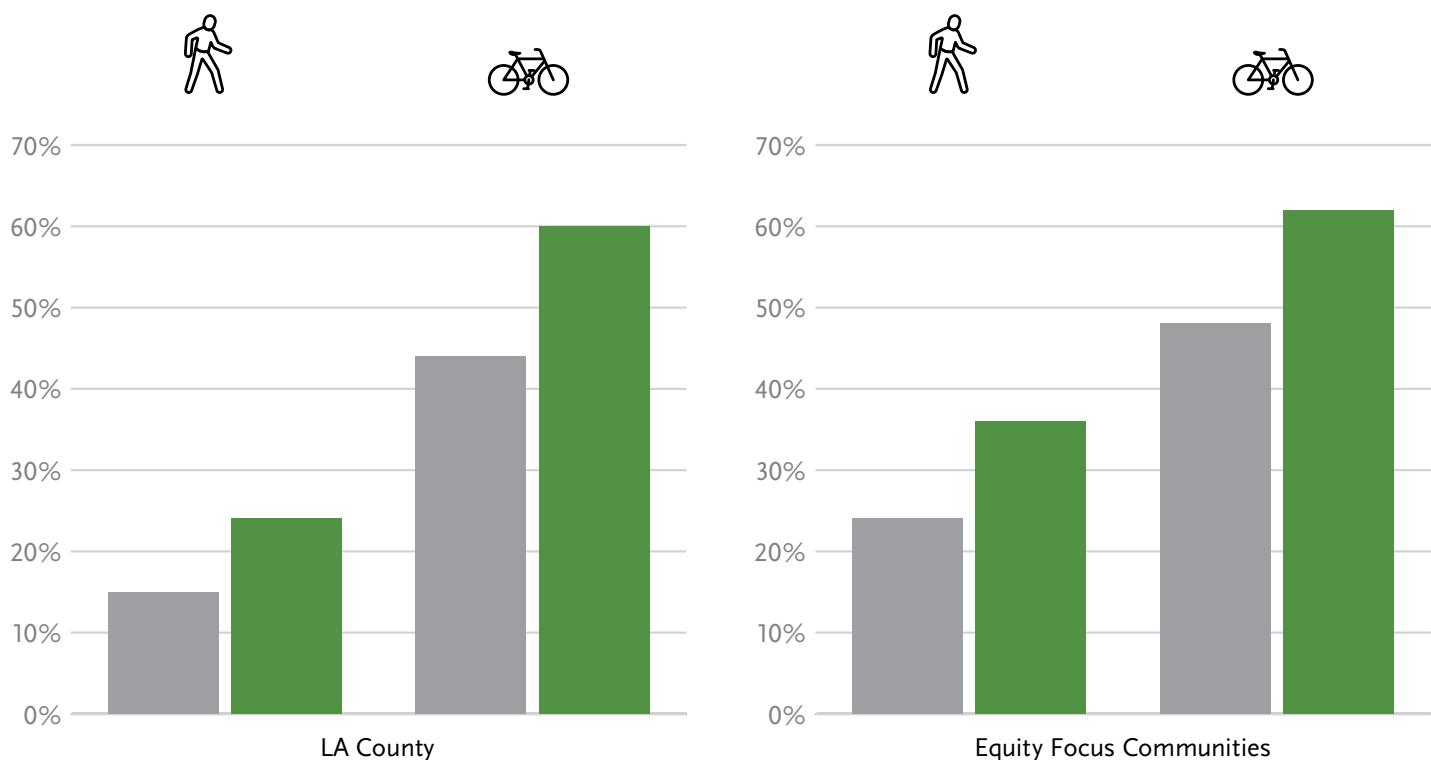
Figure 11
Transit Mode Share for Commute Trips



Better transit means access to fast, frequent and reliable public transportation. Through the expansion of rail and bus rapid transit, the 2020 L RTP will increase the percentage of households within a 10-minute walk and roll of fixed guideway transit. Countywide, the percentage of households will increase by 133% (walk) and 38% (roll). In Equity Focus Communities (see page 66), the percentage of households increase by 86% and 18% for walk and roll, respectively.

Figure 12

Percent of Households within a 10-minute Walk or Roll of Fixed Guideway Transit



**OUR
NEXT
LA[®] *is***
less congestion.





Less congestion means options to bypass traffic, and improved travel times for you. We do this by using technology and policies to manage traffic flow, respond to incidents and increase the efficiency of the roadway transportation system.

We're investing in our roadways and the communities that use them.

Metro, in partnership with the California Department of Transportation (Caltrans), who owns and maintains the freeway system, advances the planning, environmental clearance, design and construction of major capital projects such as carpool lanes, freeway widening, interchange improvements, auxiliary lanes, freeway ramp improvements and other freeway capacity and operational improvement projects. Metro also works with local agencies to implement smaller scale improvements such as arterial widenings, intersection upgrades, ramp metering, traffic signal synchronization, integrated corridor management and intelligent transportation systems (ITS) solutions.

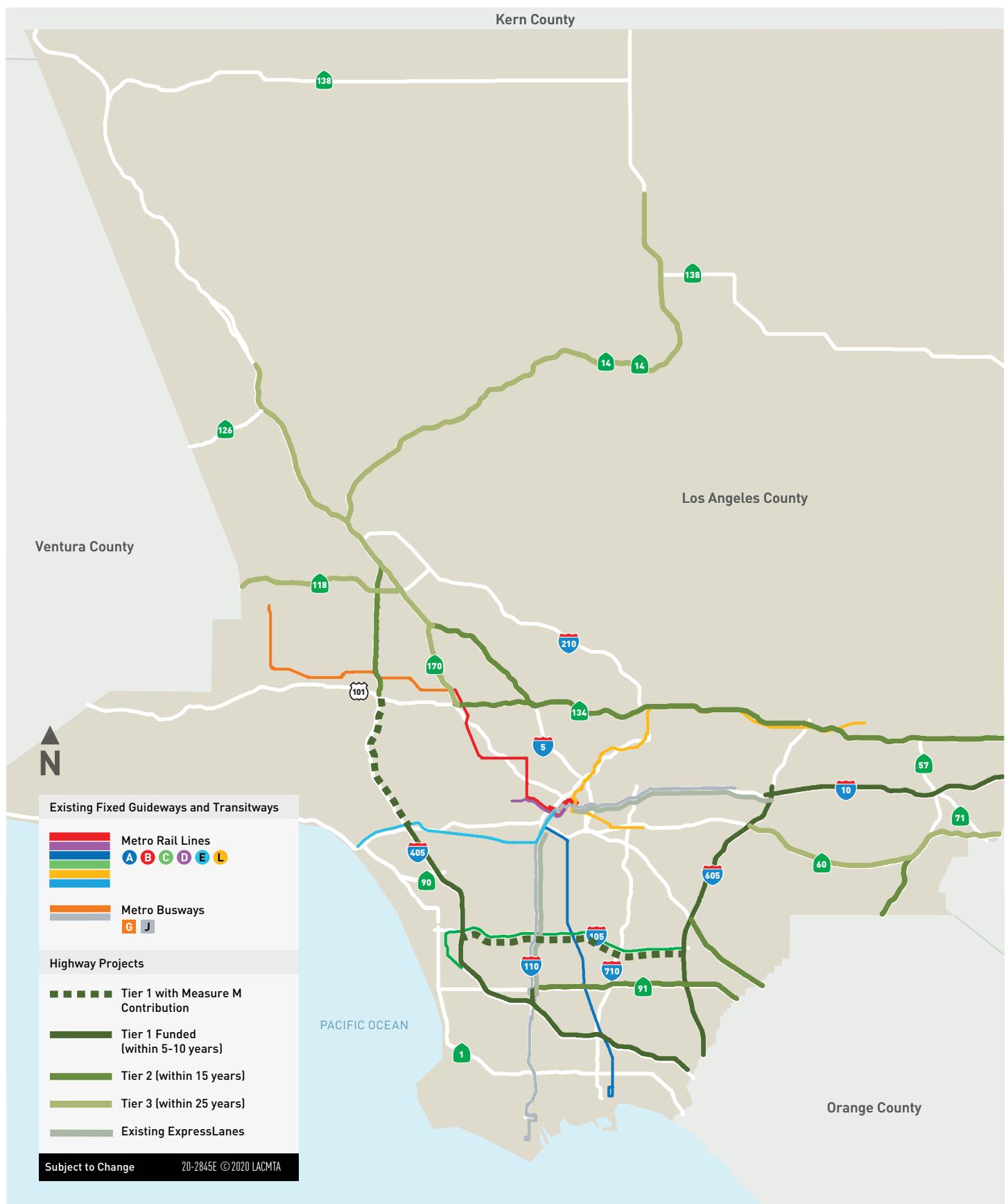
The 2020 LRTP includes more than **\$105 billion** in roadway investments, including operations and maintenance, active transportation and multi-modal projects, support for local cities and subregions, as well as almost **\$27 billion** for major highway investments.

Metro ExpressLanes

ExpressLanes are dynamically priced toll lanes where single occupant vehicles (SOVs) are given the option to pay a variable fee to use the lanes and avoid delay, while carpoolers, vanpoolers and buses are permitted to use the lanes at no charge. In 2012, the carpool lanes on I-110 and I-10 were converted to ExpressLanes, where prices change based on real-time traffic demand on the facility to ensure vehicles travel at least 45 miles per hour in the toll lanes. This helps optimize the traffic flow in the ExpressLanes and provides a more reliable option when traffic in the other lanes slows down. The I-110 and I-10 ExpressLanes have saved commuters, on average, six minutes during peak morning commutes and has led to increased bus ridership on express bus routes that use the lanes. The ExpressLanes Strategic Network is illustrated in Figure 13.

Figure 13

EXPRESSLANES STRATEGIC NETWORK



Highway Investment

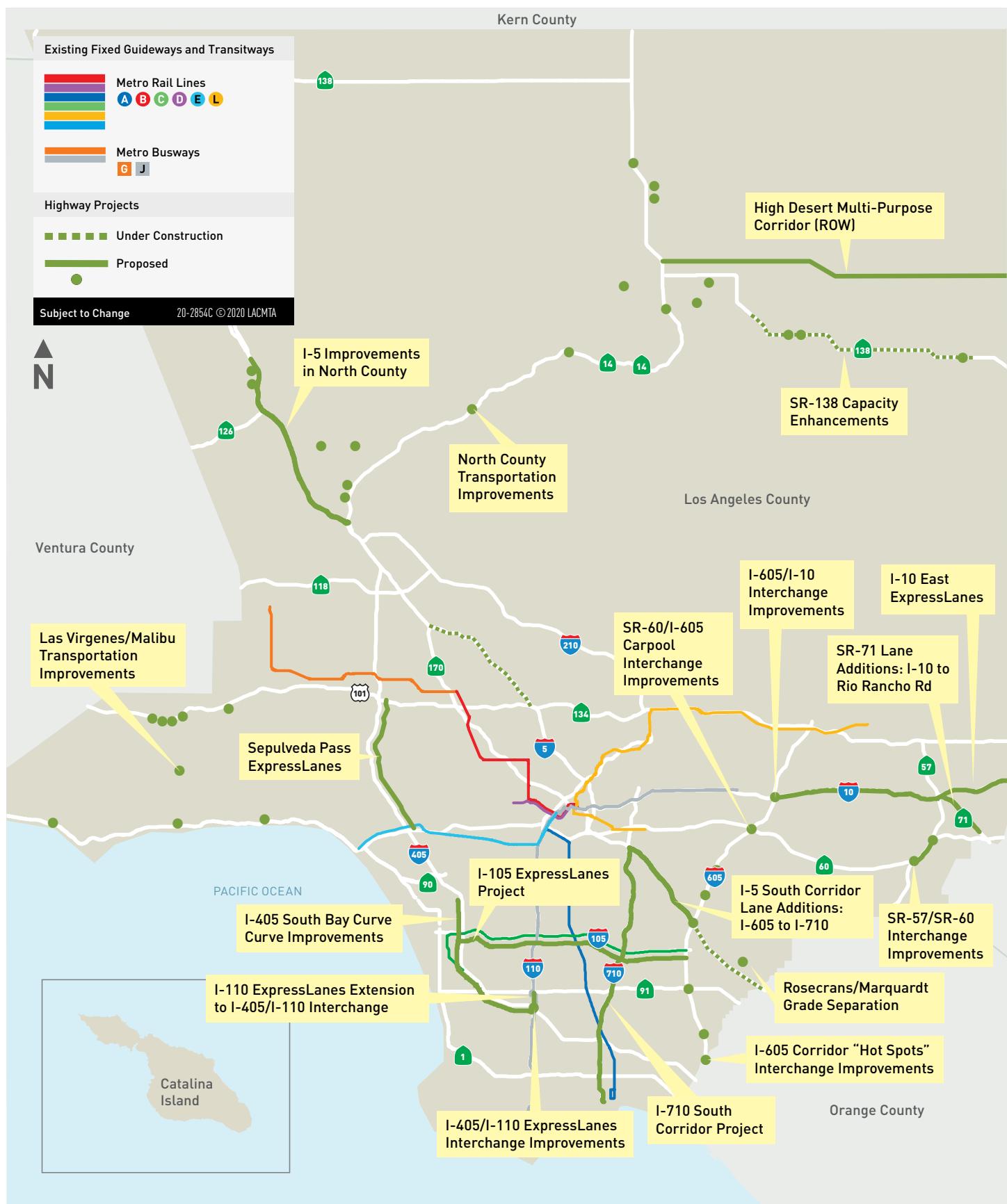
Figure 14

Major Highway Projects		\$ IN MILLIONS	ESTIMATED OPEN YEAR
I-5 Capacity Enhancement (I-605 to Orange County Line)		1,410	2023
I-5 North Carpool Lanes – SR-134 to SR-170		637	2023
Rosecrans/Marquardt Grade Separation		155	2024
Alameda Corridor East Grade Separations Phase II		1,685	2024
SR-71 Gap from I-10 to Rio Rancho Rd		379	2026
I-5 North Capacity Enhancements (SR-14 to Parker Rd)		679	2026
Highway Operational Improvements in Las Virgenes/Malibu subregion		175	2026
Sepulveda Pass Transit Corridor (Phase 1 – ExpressLanes)		311	2026
I-105 ExpressLanes from I-405 to I-605		530	2027
SR-57/SR-60 Interchange Improvements		422	2027
I-10 ExpressLanes from I-605 to LA/ San Bernardino Line		197	2028
SR-138 Capacity Enhancements		200	2028
I-605 Corridor "Hot Spots" Interchange Improvements		2,639	2030
Highway Operational Improvements in Arroyo Verdugo subregion		170	2030
High Desert Multi-Purpose Corridor		393	2034
I-405, I-110, I-105 and SR-91 Ramp and Interchange Improvements (South Bay)		1,413	2039
Countywide Soundwall Construction		590	2040
I-710 South Corridor Project (Phase 1)		5,697	2040
I-710 South Corridor Project (Phase 2)		1,512	2041
I-5 Corridor Improvements (I-605 to I-710)		2,036	2042
I-405/I-110 Int. HOV Connect Ramps & Interchange Improvements		504	2044
I-110 ExpressLanes Ext South to I-405/I-110 Interchange		599	2046
I-605/I-10 Interchange		1,287	2047
SR 60/I-605 Interchange HOV Direct Connectors		1,055	2047
I-405 South Bay Curve Improvements		883	2047
SR-710 North Corridor Mobility Improvement Projects		1,086	Varies
Total		26,644	

L RTP project costs may not match Measure M expenditure plan due to year of expenditure escalation and prior spending. Final alignments and limits to be determined during environmental processes.

Figure 15

PLANNED HIGHWAY PROJECTS



Final alignments to be included during environmental processes.

Priority Area 2: Less Congestion

Strategy 2.1: Implement operational improvements with technology

By implementing technology improvements, Metro aims to manage congestion, improve safety and provide more reliable travel times for passenger and freight vehicles. Metro embraces technology to advance operational improvements, including through the Regional Integration of Intelligent Transportation Systems (RIITS) and the Countywide Signal Priority Program.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
2.1a. Implement integrated corridor management (ICM) projects, including the I-210 Connected Corridors project		●			●		●
2.1b. Integrate freeway Intelligent Transportation Systems (ITS) strategies	●				●		●
2.1c. Implement arterial ITS programs, including Countywide Signal Priority Program and traffic signal synchronization	●				●		●
2.1d. Prepare for connected and autonomous vehicles (CAV) and implement other smart highway strategies			●		●		●

Strategy 2.2: Improve traveler information

Real time, accurate travel information is an important resource for managing roadway congestion. Metro plays a vital role as a regional agency to collect and share information with local partners and residents.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
2.2a. Continue and improve 511 system	●				●		●
2.2b. Share transportation information with regional partners	●						●

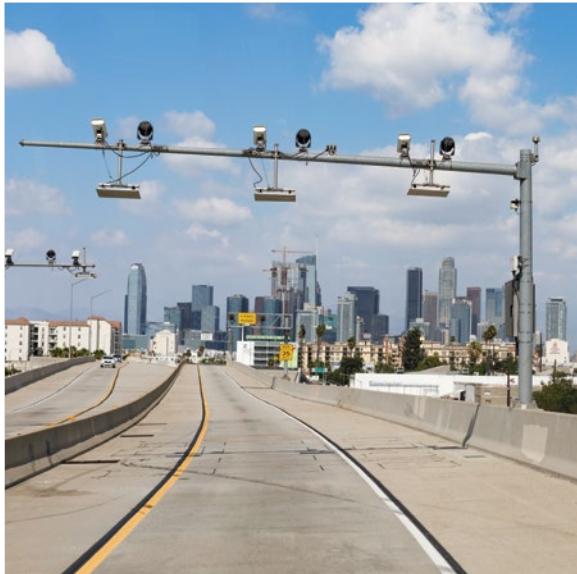
Strategy 2.3: Expand the managed lane network

Metro understands that we cannot add new lanes to most freeways, so to improve traffic flow, we must manage our system better. Managed lanes, such as high-occupancy vehicle (HOV) lanes and high-occupancy toll (HOT) lanes, help optimize the traffic flow in one or two lanes, thereby increasing the capacity of the whole corridor. HOT lanes, called ExpressLanes in LA County, allow carpoolers to travel for free, while allowing solo drivers to pay a dynamically priced toll.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
2.3a. Extend the high-occupancy vehicle network	●			●			●
2.3b. Complete the Tier 1 ExpressLanes network	●	●		●	●		●
2.3c. Complete HOV and ExpressLanes direct connectors (I-105/I-605; I-110/I-405; I-605/SR-60)		●		●			●
2.3d. Complete the Tier 2 ExpressLanes network			●	●	●		●
2.3e. Complete the Tier 3 ExpressLanes network			●	●	●		●
2.3f. Evaluate financial policies to expand the ExpressLanes system using revenues generated from the existing network	●				●		●

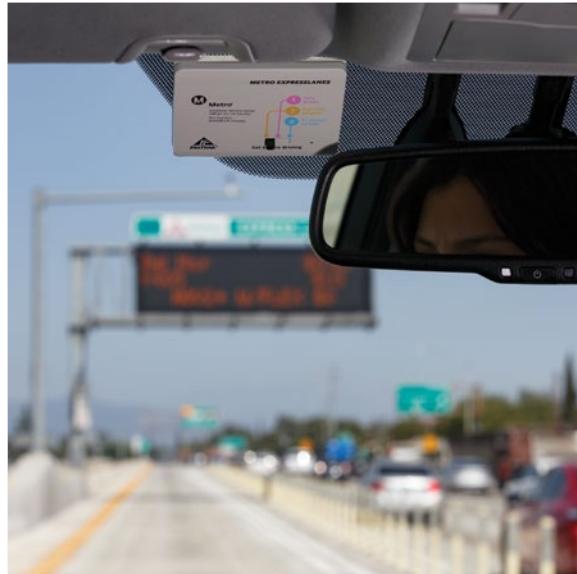
Integrated Corridor Management

Caltrans, Metro, and local agencies are piloting the I-210 Connected Corridor project that includes Integrated Corridor Management (ICM) strategies along I-210 in the San Gabriel Valley. ICM is an Intelligent Transportation Systems (ITS) strategy to manage non-recurring congestion along a corridor by utilizing advanced technologies and systems. ICM components include active monitoring of all transportation modes and facilities within the corridor, on and off the freeway, including ramp metering, traffic signal coordination, incident traffic management, advanced traveler information system, and other advanced technologies and techniques.



ExpressLanes Expansion

By using dynamic pricing based on the current usage level, traffic flow in the ExpressLanes is continuously managed to maintain speed and flow, providing a more reliable option. The 2017 Countywide ExpressLanes Strategic Plan established a vision for a network of ExpressLanes to increase mobility throughout LA County. Targeted corridors have been identified by tiers, with near-term potential (Tier 1) within five to 10 years, mid-term potential (Tier 2) within 15 years, and longer-term potential (Tier 3) within 25 years. The ExpressLanes network expansion (as illustrated in Figure 13) is predicated upon the assumption that revenues from each operating segment will be leveraged to develop other portions of the network.



Regional Integration of ITS (RIITS)

RIITS is a program that enables the efficient compilation, management and exchange of transportation information. RIITS integrates and presents transportation information via data feeds to allow government agencies to exchange data with each other, and provides private companies access to the data to share with the public. RIITS consists of a physical network, operational system and administrative processes in support of real-time exchange of information among agencies in Southern California. Information is currently exchanged with Caltrans Districts 7, 8 and 12, Los Angeles Department of Transportation, California Highway Patrol (CHP), Metro, Foothill Transit, LA County Department of Public Works and others.

Strategy 2.4: Minimize impact of roadway incidents

Metro aims to quickly and safely clear roadway incidents to improve traffic flow and lessen congestion. The Kenneth Hahn Callbox System and Metro Freeway Service Patrol work together to allow for quick response and clearance of stalled vehicles on the freeway.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
2.4a. Continue and expand Metro Freeway Service Patrol	●				●		
2.4b. Continue the Kenneth Hahn Callbox System	●					●	●

Strategy 2.5: Support efficient and sustainable goods movement

The LA County Goods Movement Strategic Plan, under development with stakeholders across the county, will develop a comprehensive approach that balances various goals, including the efficient and effective flow of goods to support economic prosperity with equity and environmental sustainability.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
2.5a. Implement LA County Goods Movement Strategic Plan			●		●		●
2.5b. Develop curbside mobility improvements in partnership with regional agencies	●				●		●
2.5c. Invest in multi-modal freight improvement options (rail investment and clean truck program)				●			●
2.5d. Improve freight traveler information sharing	●				●		●

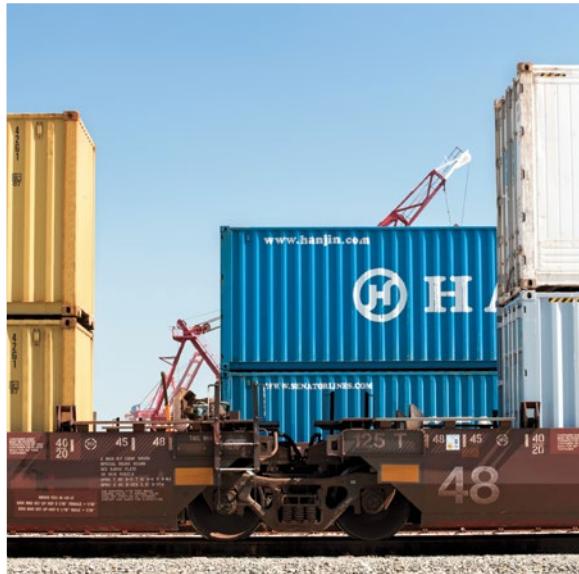
Strategy 2.6: Enhance regional circulation

The transportation system is a network that requires systematic approaches to address regional circulation issues. Metro is exploring regulatory and pricing mechanisms, as well as the expansion of current programs to manage demand and enhance circulation.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
2.6a. Implement New Mobility Regional Roadmap, a framework for building a countywide coalition to collectively determine the best path forward for managing new mobility	●				●		●
2.6b. Complete Traffic Reduction Study that will explore how congestion pricing and additional transportation options could work together to reduce traffic congestion and increase mobility	●				●		●
2.6c. Recommend a pilot traffic reduction program after completion of the Traffic Reduction Study			●	●	●		●
2.6d. Continue to expand Metro Rideshare/Vanpool and Shared Mobility Program	●	●			●		●
2.6e. Support transportation demand management (TDM) programs and trip reduction initiatives, including telecommuting	●				●		●

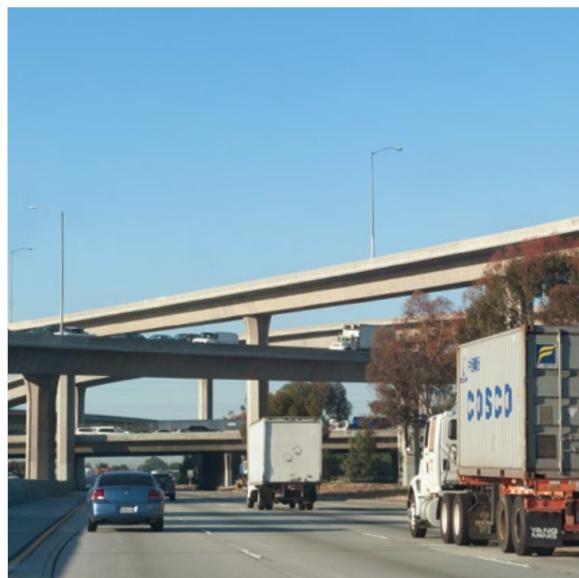
Goods Movement Strategic Plan

Safe and efficient goods movement through LA County supports a vibrant quality of life for its residents and the long-term economic health and competitiveness of the region. A culture of innovation, adoption of technology such as ITS and DrayFlex, and strategic investment in our multimodal goods movement transportation system will improve the movement of goods through the major seaports, the Ports of Long Beach and Los Angeles, airports, and intermodal facilities to our homes and businesses. Developing sustainability and equity strategies to overcome a history of inequitable impacts such as air pollution, displacement, and lack of investment related to freight while developing stronger skillsets and workforce opportunities for disadvantaged communities will be vital to implement LA County's Goods Movement Strategic Plan and its Sustainable Freight Competitiveness Framework.



Traffic Reduction Study

Metro is conducting a Traffic Reduction Study (formerly called the Congestion Pricing Feasibility Study), to determine: if a traffic reduction program would be feasible and successful in LA County; where and how a pilot program with congestion pricing and complementary transportation options could achieve the project goals of reducing traffic congestion; and identify willing local partners to collaborate with on a potential pilot program. Metro will engage stakeholders and the public throughout this process. Through engagement with stakeholders, the study will explore how to affect additional positive outcomes that will benefit residents, workers, and businesses in LA County, including improving the economy, supporting environmental and economic justice, and improving health and safety.



Strategy 2.7: Enhance the operation of the state highway system

Metro continues to address key bottlenecks in LA County, some of the most congested in the US. Metro works with Caltrans and regional partners to plan, build and maintain projects that address highway safety, capacity and operational efficiency.

ACTION	NOW	SOON	FUTURE	BUILD	MANAGE	MAINTAIN	PARTNER
2.7a. Work with Caltrans and local agencies to construct capacity-improving projects to address freeway bottlenecks	●			●			●
2.7b. Work with Caltrans and local agencies on a system approach to create a roadway network comprising the state highways and local arterials to improve throughput and alleviate traffic congestion	●				●		●

Strategy 2.8: Improve the resiliency of Metro's transportation system

A resilient Metro system is prepared and able to mitigate future hazards that would otherwise interfere with operations, disrupt service and endanger passengers. Metro addresses system resiliency with risk assessments, decision making that considers hazards, and climate adaptation plans and policies.

ACTION	NOW	SOON	FUTURE	BUILD	MANAGE	MAINTAIN	PARTNER
2.8a. Conduct and maintain a multi-hazard risk assessment to understand vulnerabilities of the transportation system	●					●	
2.8b. Incorporate considerations for all hazards into Metro decision-making about capital planning, procurement, asset management and operations	●					●	
2.8c. Regularly update resilience and climate adaptation plans and policies to address changing hazards and risks to system service	●				●		
2.8d. Implement hazard mitigation and climate adaptation strategies to increase transportation system resilience and passenger safety	●				●		



Our congestion reduction plan means less delays for drivers.

The congestion reducing strategies included in the 2020 LRTP will lead to a reduction in vehicle miles traveled and vehicle hours of delay per capita. Compared to the future trend, the LRTP will lead to a 31% reduction in delay and a 9% reduction in vehicle miles traveled, a key metric for tracking the usage of personal vehicles.

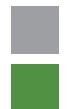
 Future Trend (2047)
 With 2020 LRTP (2047)

Figure 16
Annual Vehicle Miles Traveled Per Capita

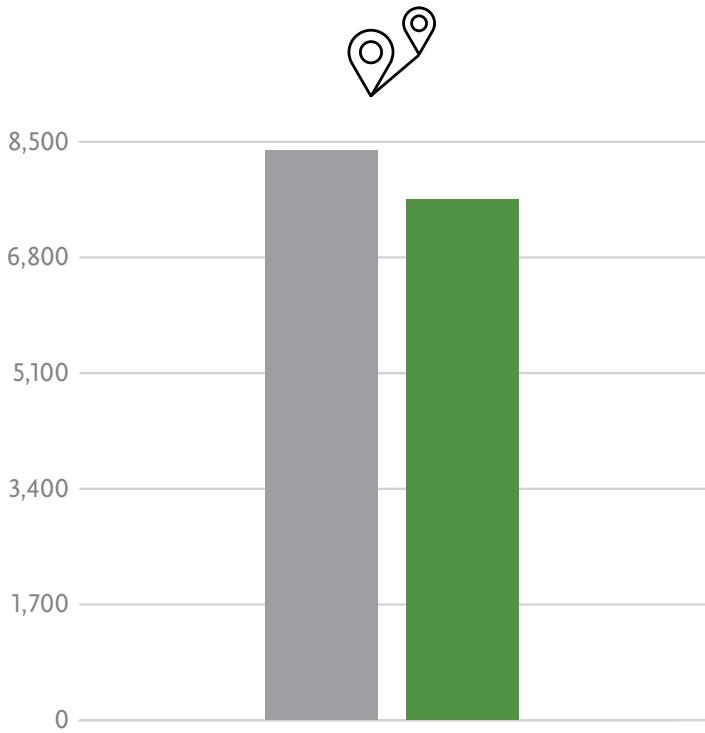
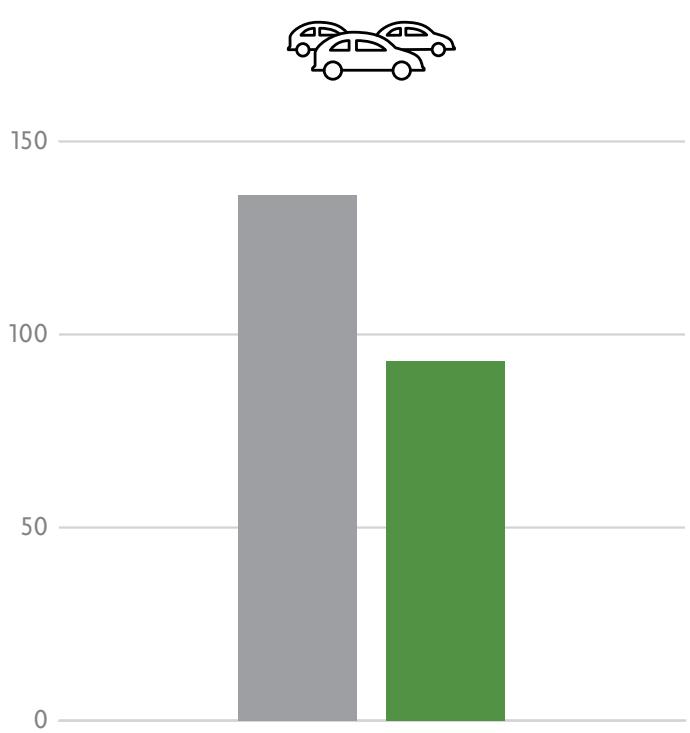


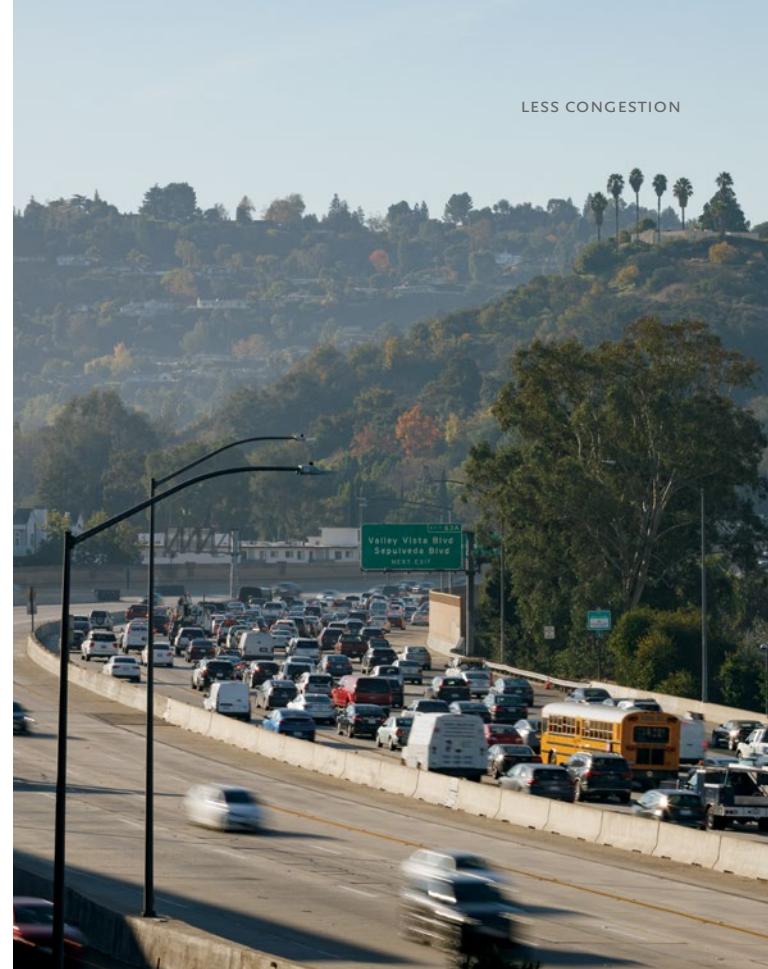
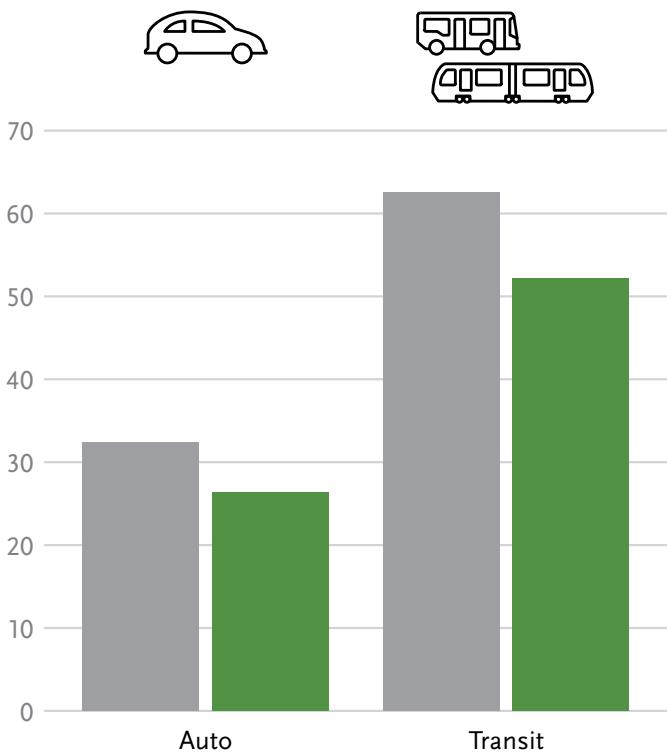
Figure 17
Annual Vehicle Hours of Delay Per Capita



Less congestion means better travel times for commuters. Compared to the future trend, the 2020 LRTP is projected to reduce average morning travel times by 19% for automobiles and 9% for transit trips.

Figure 18

Average Morning Travel Time (minutes)



**OUR
NEXT
LA[®] *is***
complete streets.



Complete streets create a comprehensive, integrated network that utilizes infrastructure and design to allow safe and convenient travel along streets for all users. This means better connectivity and integration of all transportation modes, including active transportation, private vehicles, transit and commercial deliveries. Complete streets provide safer crossing and roadway facilities for bicyclists and pedestrians, have more greenery and fewer potholes, and help create a more environmentally sustainable transportation system.



We're investing in better options for bikes and pedestrians.

The 2020 LRTP includes close to \$7 billion in funding for active transportation projects, including major facilities and bicycle and pedestrian programs at the city level. There are several major multi-use active transportation facilities funded in the LRTP, including:

> Rail to Rail Active Transportation Corridor Segment A

The Rail to Rail Active Transportation Corridor is a 5.6 mile multi-use path connecting the Fairview Heights Station of the soon-to-be-open Crenshaw Line in Inglewood to the Slauson A (Blue) Line station in South Los Angeles.

> LA River Path – Central LA

The Los Angeles River Path project is an eight-mile bicycle and pedestrian path gap closure between Elysian Valley and Maywood, through downtown Los Angeles.

> LA River Path – San Fernando Valley

To complete the full LA River Path and Greenway Trail, the LA River Path will connect the San Fernando Valley to the existing LA River Path near Griffith Park. This 13-mile path will help create a 52-mile continuous active transportation corridor from Long Beach to Warner Center, and be a cornerstone of the efforts to revitalize the LA River.

Active Transportation

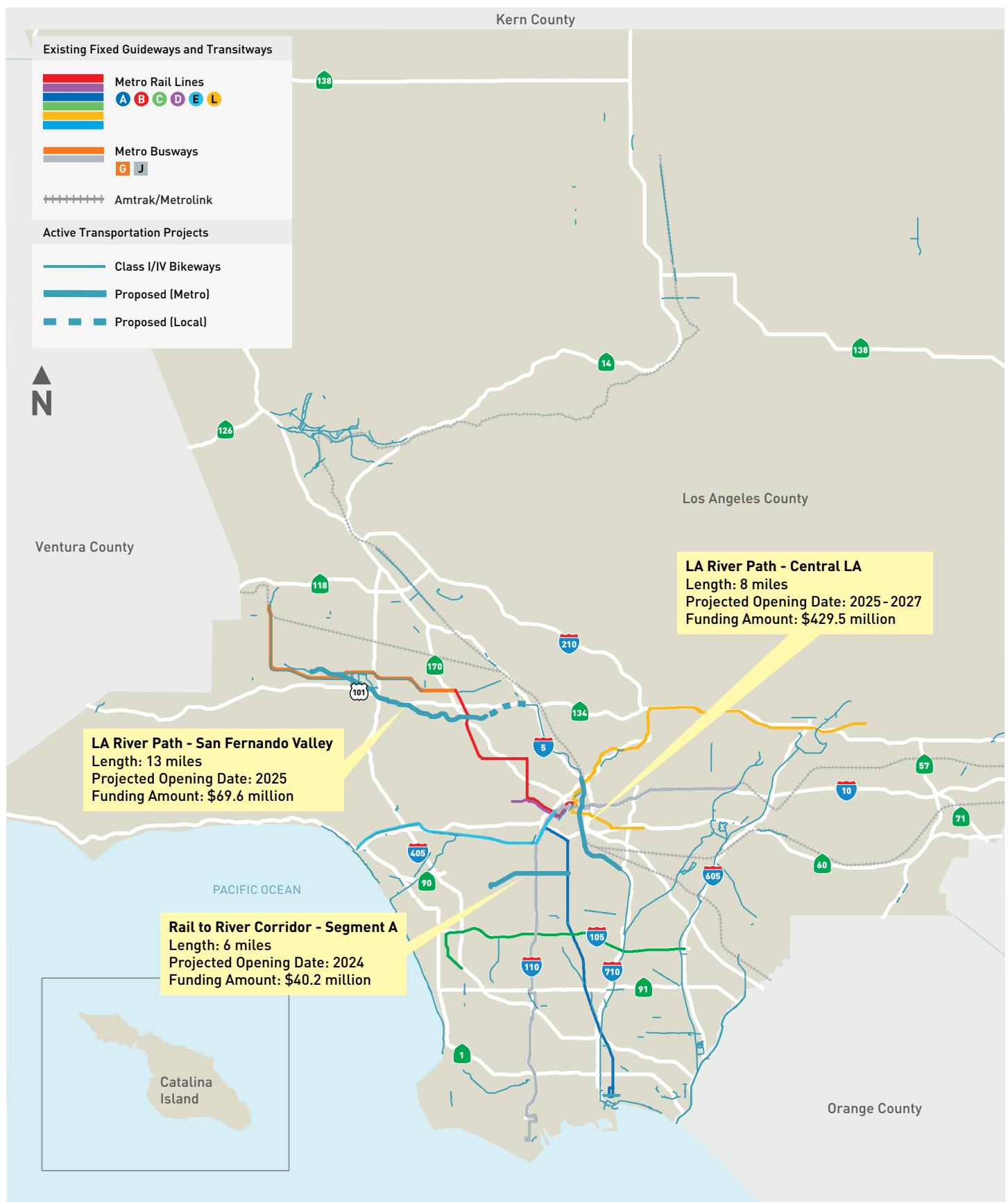
In addition to the major capital commitments, Metro supports active transportation to promote walking, cycling and rolling through a series of programs, policies and investment strategies. Three important foundational documents include Metro's Complete Streets Policy (2014), First/Last Mile (FLM) Strategic Plan (2014), and Active Transportation Strategic Plan (2016).

Metro is investing more than \$850 million in Active Transportation grants, in alignment with Metro policies and plans. This demonstrates Metro's ongoing commitment to enhance access to transit stations, create safer streets and develop a regional network to improve mobility for people who walk, bike and take transit. Programs that support these policies include Metro's Bike Share program, our Bike Parking Program, and the First/Last Mile Program.

Finally, the majority of the planning and support for active transportation and complete streets projects occurs at the local level. Metro provides funding for local projects and partners with local jurisdictions to support and advance projects that further our regional priorities.

Figure 19

ACTIVE TRANSPORTATION CORRIDOR PROJECTS



Priority Area 3: Complete Streets

Strategy 3.1: Improve safety for all users

Metro's approach to safety is multi-pronged. The Complete Streets Policy is centered around redesigning streets with safety for all users as the top priority. Metro's vision is to prioritize safety in all projects with an overarching goal of reducing injuries and fatalities.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
3.1a. Implement Complete Streets Policy	●				●		●
3.1b. Implement Bicycle Education Safety Team program	●					●	
3.1c. Prioritize and incorporate safety improvements in all projects to reduce injuries and fatalities	●			●	●		●

Strategy 3.2: Enhance access to transit stations

Metro strives to enhance transit stations by implementing first/last mile projects and strategies that improve multi-modal access around stations.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
3.2a. Implement First/Last Mile Program, including Board policy directives	●	●	●		●		●
3.2b. Implement integrated improvement plans for existing intermodal station facilities, including the Connect Union Station Action Plan	●		●	●			●
3.2c. Implement Micro Mobility Vehicles Program	●				●		●
3.2d. Provide secure bike parking options at transit stations	●			●			

Strategy 3.3: Establish active transportation improvements as integral elements of the transportation system

Active transportation refers to any non-motorized mode of travel, including walking, biking and rolling. Safe and effective active transportation infrastructure, including addressing physical barriers like freeway, rail, and river crossings, is critical to Metro because these modes of travel provide connectivity to our transit hubs, promote public health and improve air quality.

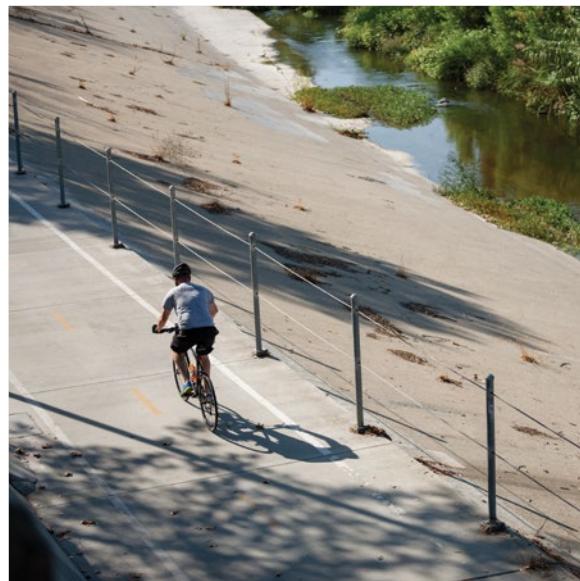
Action	Now	Soon	Future	Build	Manage	Maintain	Partner
3.3a. Complete LA River Path Project	●	●		●			●
3.3b. Complete Rail to River Active Transportation Corridor		●	●	●			●
3.3c. Implement recommendations of Active Transportation Strategic Plan		●	●		●		
3.3d. Support Metro Bike Share and local bike share programs expansion	●				●		●

Complete Streets Policy

Metro's Complete Streets Policy views transportation improvements as opportunities to create safe, accessible streets for all users, including but not limited to pedestrians, public transit users, bicyclists, people with disabilities, seniors, children, motorists and movers of commercial goods. Through incremental changes in capital projects and regular maintenance and operations improvements, the street network will gradually become safer and more accessible for travelers of all ages and abilities. In partnership with state, regional and local efforts, this policy will create a more complete and integrated transportation network for all modes of travel in LA County.

LA River Path

The Los Angeles River Path project is a proposed eight-mile bicycle and pedestrian path extension between Elysian Valley and Maywood, through downtown Los Angeles and the City of Vernon. The project aims to create a safe, accessible path for people walking, bicycling and rolling to get to destinations that matter in their daily lives. The project will close an existing gap in the Los Angeles River Bike Path and Greenway Trail, providing a seamless 52-mile bicycle and pedestrian route from the San Fernando Valley to Long Beach. Completing the LA River Path will enhance recreation, livability, regional connectivity and provide an outstanding user experience, access to opportunity and separation from vehicular traffic.



First/Last Mile Strategic Plan

Metro developed a First/Last Mile Strategic Plan to address the challenge that riders face getting from their home to transit and from transit to their final destination. FLM strategies extend station areas, improve safety and enhance the visual aesthetic. The plan identifies barriers and potential improvements for the FLM portions of a transit trip. It provides a systematic yet adaptable vision for implementing FLM strategies, such as:

- > Infrastructure for walking, rolling and biking (e.g., bike lanes, bike parking, sidewalks and crosswalks)
- > Shared use services (e.g., bike share and car share)
- > Facilities for making modal connections (e.g., kiss and ride and bus/rail interface)
- > Signage and wayfinding, and information and technology that eases travel (e.g., information kiosks and mobile apps).



Strategy 3.4: Maintain a state of good repair on roadways

A safe and reliable transportation system requires that assets are maintained in a state of good repair. Metro partners and funds highway projects that upgrade or replace roadway elements to improve system safety.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
3.4a. Fund highway and arterial projects with state of good repair elements	●						●
3.4b. For more efficient investment, work with Caltrans to combine state highway repair and maintenance projects with Metro-funded capacity and operational enhancements	●					●	●

Strategy 3.5: Demonstrate sustainable design and construction practices

Metro strives to incorporate sustainable design and construction practices that reduce the impact of system growth. Metro aims to expand and improve the policy and related sustainability standards, while pursuing certifications set by national and state green building agencies.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
3.5a. Improve sustainability standards for project design and expand the Green Construction Policy (GCP)	●			●			
3.5b. Pursue green certification and implement sustainability and resiliency technical requirements and specifications	●			●			

Strategy 3.6: Reduce regional GHG and criteria air pollutant emissions

Metro is committed to reducing greenhouse gas (GHG) emissions and air quality pollutants. Transportation has the most significant impact on regional emissions, and to do our part, Metro plans to reduce our agency emissions by 79% relative to 2017 levels.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
3.6a. Implement projects identified in the Energy Conservation Project Portfolio	●			●			
3.6b. Decarbonize Metro's energy and fuel supply	●				●		
3.6c. Implement a Scheduled Maintenance Program for stationary and mobile emissions sources to reduce emissions	●					●	
3.6d. Support local and regional projects that decrease GHG emissions or reduce single-occupant vehicle (SOV) trips	●			●			●

Green Construction

Metro established a Green Construction Policy (GCP) in 2011 to reduce emissions during construction, as well as the Sustainability Plan Program to assist contractors with meeting CALGreen obligations. The GCP was updated in 2018, requiring contractors to use renewable diesel for all diesel engines and thus reducing the negative health impacts from diesel exhaust. This effort reaffirms Metro's commitment to protect the communities we serve, especially those disproportionately affected by air pollution.



Zero-Emission Fleet

Metro will transition to zero-emission buses systemwide. The G Line (Orange) will be the first to deploy electric-battery buses as part of its improvements project, scheduled for completion by 2025. Originally planned by 2040, Metro would like to fully electrify by 2030. Metro is also taking the lead in forming a Countywide Zero-Emission Trucks Collaborative to promote consistency among public agencies in working to catalyze the development and deployment of zero-emission trucks in LA County, beginning with the I-710 Clean Trucks Program. This collaborative will include the Ports of Long Beach and Los Angeles, Caltrans, Southern California Association of Governments and the South Coast Air Quality Management District.



Our plan helps reduce emissions, for a healthier LA.

Safety and environmental sustainability are core tenets of Complete Streets strategies. The 2020 LRTP will help Metro reduce our emissions and the emissions of the transportation sector as a whole. The improvements are projected to decrease greenhouse gas (GHG) emissions by 19% and particulate matter emissions by 17% relative to the future trend.

 Future Trend (2047)
 With 2020 LRTP (2047)

Figure 20
Annual Million Metric Tons of CO₂ Equivalent

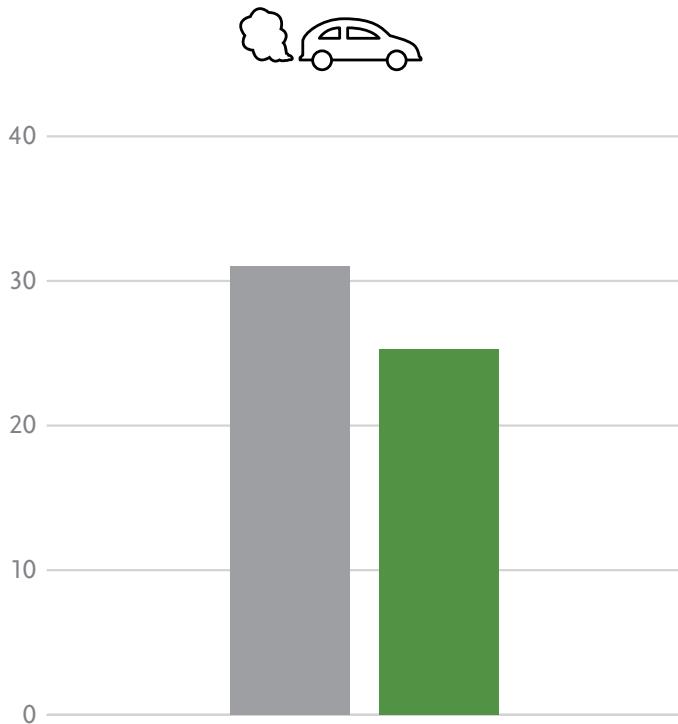
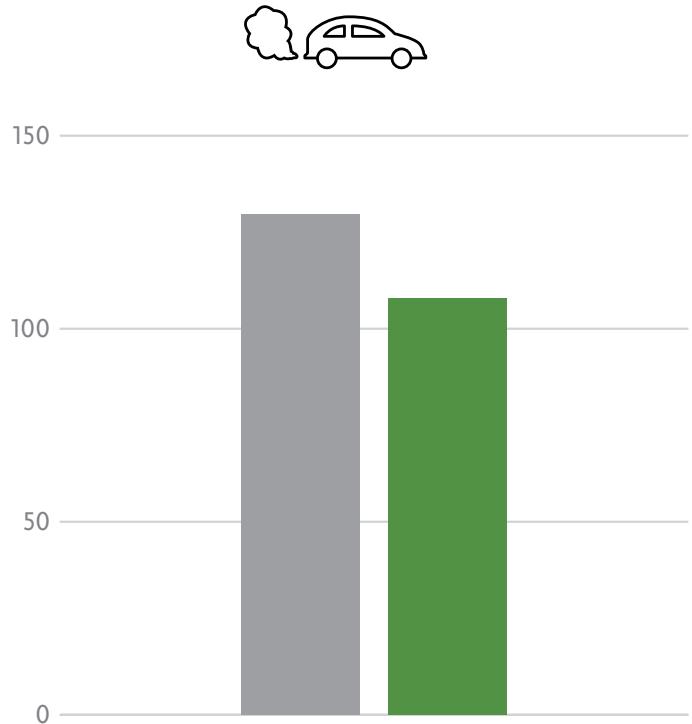


Figure 21
Annual Tons Particulate Matter (PM10)





Harbor Gateway Station, *Dreams*,
Béatrice Coron, artist.



**OUR
NEXT
LA^{*}** *is access
to opportunity.*



Access to opportunity means investing in communities to connect people to what they need. Travelers must get to where they need to go, when they need to be there – from their home to their job to their daily activities. Increasing access to opportunity brings better transit closer to jobs and homes, and supports small businesses, local economies and families.

We're investing in opportunity for communities that need it most.

For a transportation system to be successful it must allow everyone it serves to reach the things they need within a reasonable period of time. Access to jobs, education, healthcare, and other essential services must be the primary focus of transportation, as a stable foundation for vibrant communities. As stewards of the transportation system, Metro is responsible for providing transportation options, improving access, and investing in communities.

In 2018, Metro adopted its Equity Platform to help ensure system changes prioritize those most in need of improved access to opportunity. Metro recognizes that there are deep-rooted and pervasive racial and socioeconomic inequities that create disparate results and impacts, even when the intention is to help all. Accordingly, we need an understanding of those disparities and an intentional focus on those faring the worst in order to truly improve access to opportunity for all. The Equity Platform is structured around four pillars:

- I. Listen and Learn
- II. Define and Measure
- III. Focus and Deliver
- IV. Train and Grow.

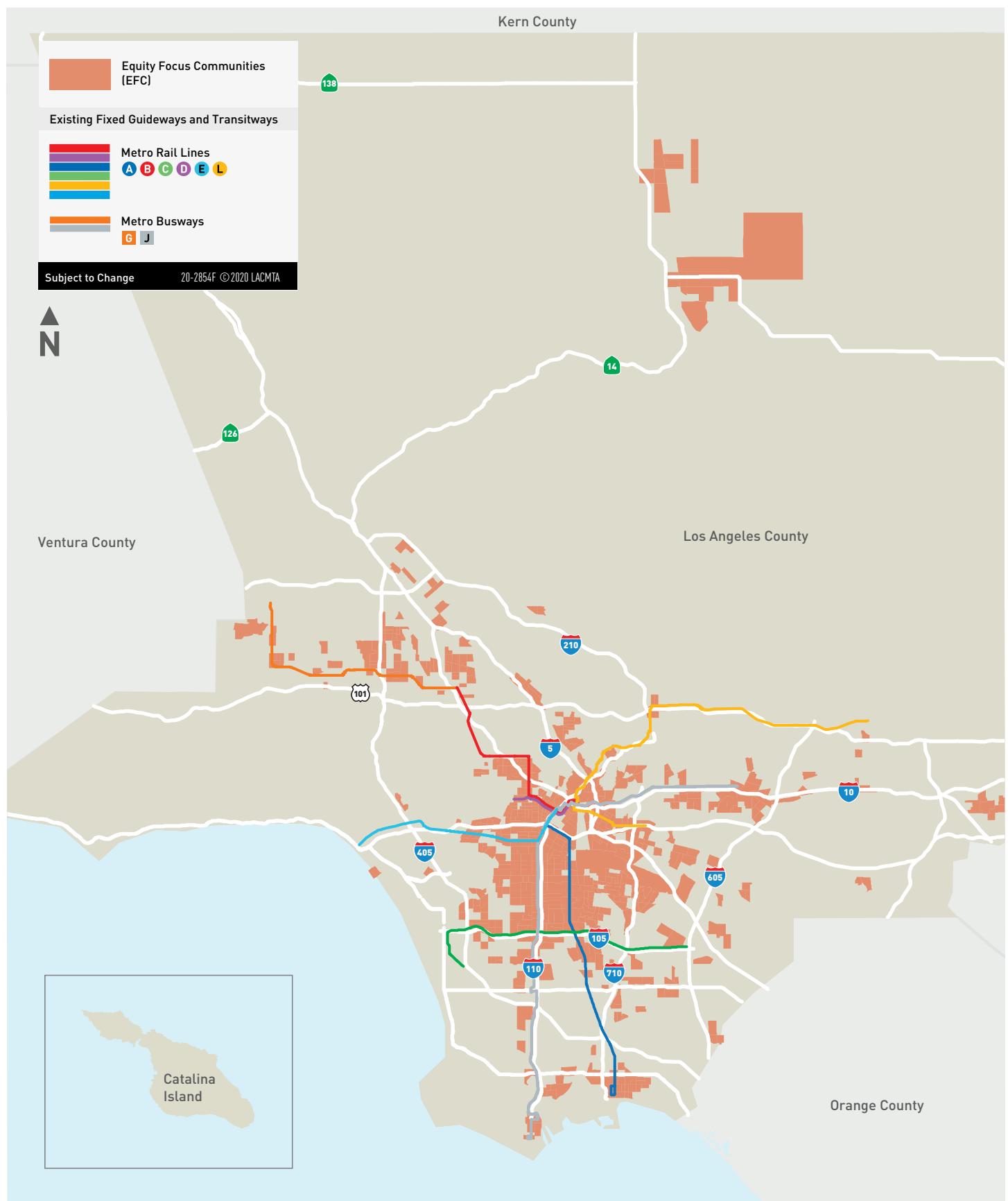
The LRTP was developed in accordance with these pillars, through robust public engagement, as well as clearly defining our goals and performance measures for tracking our effort to deliver better future access and mobility. This process and evaluation will ensure that Metro is transparent in our activities, that we continue to learn from our stakeholders, and that we use our resources effectively to benefit our communities.

Equity Focus Communities

As part of the LRTP, Metro has defined “Equity Focus Communities” (EFCs) as those communities most heavily impacted by gaps in inequity throughout the County. These communities represent geographic areas that have the following socioeconomic characteristics; more than 40% of households are low-income and either 80% of households are non-white or 10% have no access to a vehicle. Collectively, these areas represent about 30% of the county’s population. EFCs are communities that have experienced historic disinvestments, reduced access to opportunity and housing, and policy decisions that have resulted in environmental justice disparities. As such, these communities have higher degree of various negative outcomes and are those with the greatest need.

Figure 22

METRO-DESIGNATED EQUITY FOCUS COMMUNITIES



Priority Area 4: Access to Opportunity

Strategy 4.1: Advance equity through institutional transformation to eliminate disparities

Transportation can play an important role in economic development, increased opportunity and upward mobility. Metro seeks to ensure our programs, policies and investments expand opportunities for the communities in most need.

ACTION	NOW	SOON	FUTURE	BUILD	MANAGE	MAINTAIN	PARTNER
4.1a. Implement Equity Platform	●				●		●
4.1b. Establish agency-wide definition of equity	●				●		
4.1c. Create and implement an equity assessment tool	●						●
4.1d. Prioritize investment to support those with the greatest mobility needs	●						●
4.1e. Prioritize improved access to opportunities for Equity Focus Communities	●			●			●
4.1f. Develop and advance a Racial and Socio-Economic Equity Action Plan		●			●		
4.1g. Implement Transit to Parks Strategic Plan with high equity focus / high feasibility Transit to Parks routes across the County			●				●

Strategy 4.2: Reduce household expenses on transportation

After housing, transportation is the second largest cost for many LA County households. Metro has fare assistance programs for targeted populations, including low-income households, youth and students.

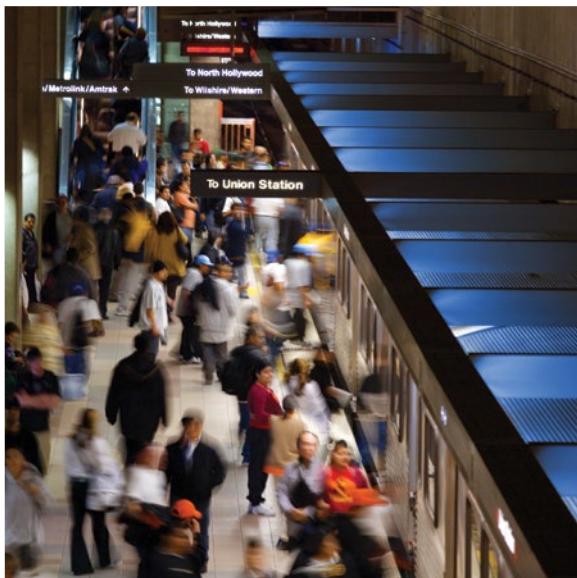
ACTION	NOW	SOON	FUTURE	BUILD	MANAGE	MAINTAIN	PARTNER
4.2a. Expand Low-Income Fare is Easy (LIFE) Program	●				●		
4.2b. Continue Youth on the Move Program	●				●		
4.2c. Continue U-Pass Program	●				●		
4.2d. Partner with transportation network companies (TNCs) to reduce the cost of accessing stations	●						●
4.2e. Explore free fares for students and the general public			●		●		●
4.2f. Complete Comprehensive Pricing Study to identify and evaluate pricing policy options relative to the goals of revenue, equity, security, ridership, and user experience	●				●		

Defining Equity

As part of our commitment to the Equity Platform Framework, Metro has developed the following definition of equity:

Equity is both an outcome and a process to address racial, socio-economic and gender disparities, to ensure fair and just access – with respect to where you begin and your capacity to improve from that starting point – to opportunities, including jobs, housing, education, mobility options and healthier communities. It is achieved when one's outcomes in life are not predetermined, in a statistical or experiential sense, on their racial, economic or social identities.

It requires community informed and needs-based provision, implementation and impact of services, programs and policies that reduce and ultimately prevent disparities.



Reduced Transit Fares

The Low-Income Fare is Easy (LIFE) program provides transportation assistance to low-income individuals in LA County. LIFE offers fare subsidies that may be applied toward the purchase of fares on Metro, any LIFE-participating transit agencies or free regional ride options. Reduced fare TAP cards are also eligible for additional savings with LIFE. Once enrolled, LIFE benefits can be loaded onto TAP cards at any participating vendor. Metro is considering free transit for students, and if additional revenue is raised through congestion pricing, Metro could subsidize transit for all riders.



Strategy 4.3: Build affordable housing near transit

Metro is working with our partners to address LA County's housing and affordability crisis through several initiatives aimed at developing more and affordable housing near transit.

Action	Now	Soon	Future	Build	Manage	Maintain	Partner
4.3a. Implement Transit Oriented Communities (TOC) Policy	●						●
4.3b. Implement Joint Development Program	●						●
4.3c. Partner to build affordable transit-oriented housing	●						●

Transit Oriented Communities (TOC)

In June 2018, the Metro Board of Directors adopted the TOC Policy, an ambitious effort that elevates Metro's commitment to prioritize equity and consider land use and community development as we plan and implement the transit system.

TOCs are places (such as corridors or neighborhoods) that, by their design, allow people to drive less and access transit more. A TOC maximizes equitable access to a multi-modal transit network as a key organizing principle of land use planning and holistic community development. TOCs differ from Transit Oriented Development (TOD) in that TOD is a specific building or development project that is fundamentally shaped by proximity to transit.

TOCs promote equity and sustainable living in a diversity of community contexts by:

- > Offering a mix of uses that support transit ridership of all income levels (e.g., housing, jobs, retail, services and recreation)
- > Ensuring appropriate building densities, parking policies, and urban design that support accessible neighborhoods connected by multi-modal transit
- > Elevating vulnerable users and their safety in design
- > Ensuring that transit related investments provide equitable benefits that serve local, disadvantaged and underrepresented communities.

In addition, the TOC Policy formalizes Metro's commitment to partner with the 88 cities and unincorporated areas in LA County and local communities to support "TOC activities". These activities are largely community development activities and support the TOC program's goals:

- > Increase transportation ridership and choice
- > Stabilize and enhance communities surrounding transit
- > Engage organizations, jurisdictions and the public
- > Distribute transit benefits to all
- > Capture the value created by transit

Metro's Joint Development program, whereby Metro partners with developers to build TODs on Metro-owned properties, is a key program where we can help foster equitable TOCs. Metro's Joint Development sites are a gateway to the Metro transit system and hold unique potential to advance community development goals while attracting new riders to transit.



Figure 23

JOINT DEVELOPMENT PROJECTS



- ② Grand Central Market
- ③ Willow
- ④ Hollywood/HIGHLAND
- ⑤ Del Mar
- ⑥ Sierra Madre Villa
- ⑦ Wilshire/Vermont Apts and School
- ⑧ Wilshire/Western
- ⑨ Hollywood/Vine
- ⑩ Hollywood/Western
- ⑪ Fillmore
- ⑫ Westlake/MacArthur Park (Phase A)
- ⑬ One Santa Fe
- ⑭ 1st/Boyle
- ⑮ Taylor Yard Lots 1, 3, 4

- ② North Hollywood
- ③ 1st/Soto
- ④ 1st/Lorena
- ⑤ Cesar Chavez/Soto
- ⑥ Cesar Chavez/Fickett
- ⑦ Division 6
- ⑧ Expo/Crenshaw
- ⑨ Mariachi Plaza
- ⑩ Vermont/Santa Monica
- ⑪ Little Tokyo/Arts District

* Sites Metro currently has in construction; is in negotiations with a developer; is conducting community engagement to inform development guidelines; or has an active Request for Proposals (RFP) out.

- ⑯ Sepulveda Park & Ride
 - ⑰ El Monte
 - ⑱ Wilshire/Crenshaw
 - ⑲ Wilshire/La Brea
- ** Sites Metro expects to release a RFP for in the next one to three years.

Strategy 4.4: Invest in the regional workforce

Metro is investing in the regional workforce through training, education and employment opportunities. Metro has several existing programs in this area and plans to open its transportation school in 2022.

ACTION	NOW	SOON	FUTURE	BUILD	MANAGE	MAINTAIN	PARTNER
4.4a. Expand training programs, career academies, apprenticeship programs and employment opportunities in LA County	●				●		●
4.4b. Implement Project Labor Agreement and Construction Careers Policy	●				●		
4.4c. Increase resources needed to train and place people in hard-to-fill positions (WIN-LA)	●				●		
4.4d. Develop logistics workforce initiatives and pilot programs		●					●

Strategy 4.5: Expand opportunities for small businesses

Metro is committed to supporting small businesses and local economies through our contracting procedures, our projects in local communities and our direct investments.

ACTION	NOW	SOON	FUTURE	BUILD	MANAGE	MAINTAIN	PARTNER
4.5a. Ensure local transportation investments support local business district programs	●						●
4.5b. Support small businesses throughout construction (Business Interruption Fund and Business Solution Center)	●						●
4.5c. Expand Metro small business programs (DBE, SBE, and DVBE) through training, partnering and mentorship programs	●				●		●

Strategy 4.6: Maximize our local investments

State and federal funding sources allow Metro to maximize our local resources. Metro continues to explore all funding opportunities and innovative project delivery mechanisms to increase the impact of our investments.

ACTION	NOW	SOON	FUTURE	BUILD	MANAGE	MAINTAIN	PARTNER
4.6a. Support local jurisdictions to submit competitive grant applications	●				●		●
4.6b. Deliver projects through alternative delivery models, including Public-Private Partnerships, as appropriate	●			●	●		●
4.6c. Leverage local transportation dollars to secure state and federal grants	●						●

E3 Training Programs

Metro is investing in transportation workers through the E3 Initiative, to expose, educate, and employ the next generation of LA County. The initiative's mission is to prepare the LA County youth for career and college pathways in the global transportation infrastructure industry by teaching them transferrable industry skills. The programs include Metro's Transportation School, Teacher Externship Program, Entry Level Trainee Program, Transportation Career Academy Program, Rail Vehicle Maintenance Program at LA Trade-Technical College, Metro Joint Apprenticeship Committee (JAC), and Metro Bridge Academy.



Supporting Local Business

Metro's Business Interruption Fund (BIF) provides financial assistance to small businesses impacted by rail construction and located along the following corridors: Crenshaw/LAX Transit Project; the Little Tokyo and 2nd/Broadway areas along the Regional Connector Transit Project; and the D Line (Purple) Extension.

Metro's Pilot Business Solution Center (BSC) provides hands-on business assistance and support services to small businesses along the Crenshaw/LAX Transit Project corridor during the years of construction.



Our plan creates jobs and boosts LA's economic health.

The 2020 LRTP will benefit the local and regional economy. Direct and indirect economic benefits come from the expenditures on transportation projects. Furthermore, transportation system enhancements generate travel time savings, and increase economic output and competitiveness. Expenditures and improvements included in only the capital plan of the LRTP, not including the additional policies and programs, are anticipated to increase Gross Regional Product by \$196 billion and create 1.84 million jobs over the 30-year period.

Figure 24

Net Jobs Created and Increase in Gross Regional Product from Capital Investment



Jobs*	1.84M	Gross Regional Product	\$196B
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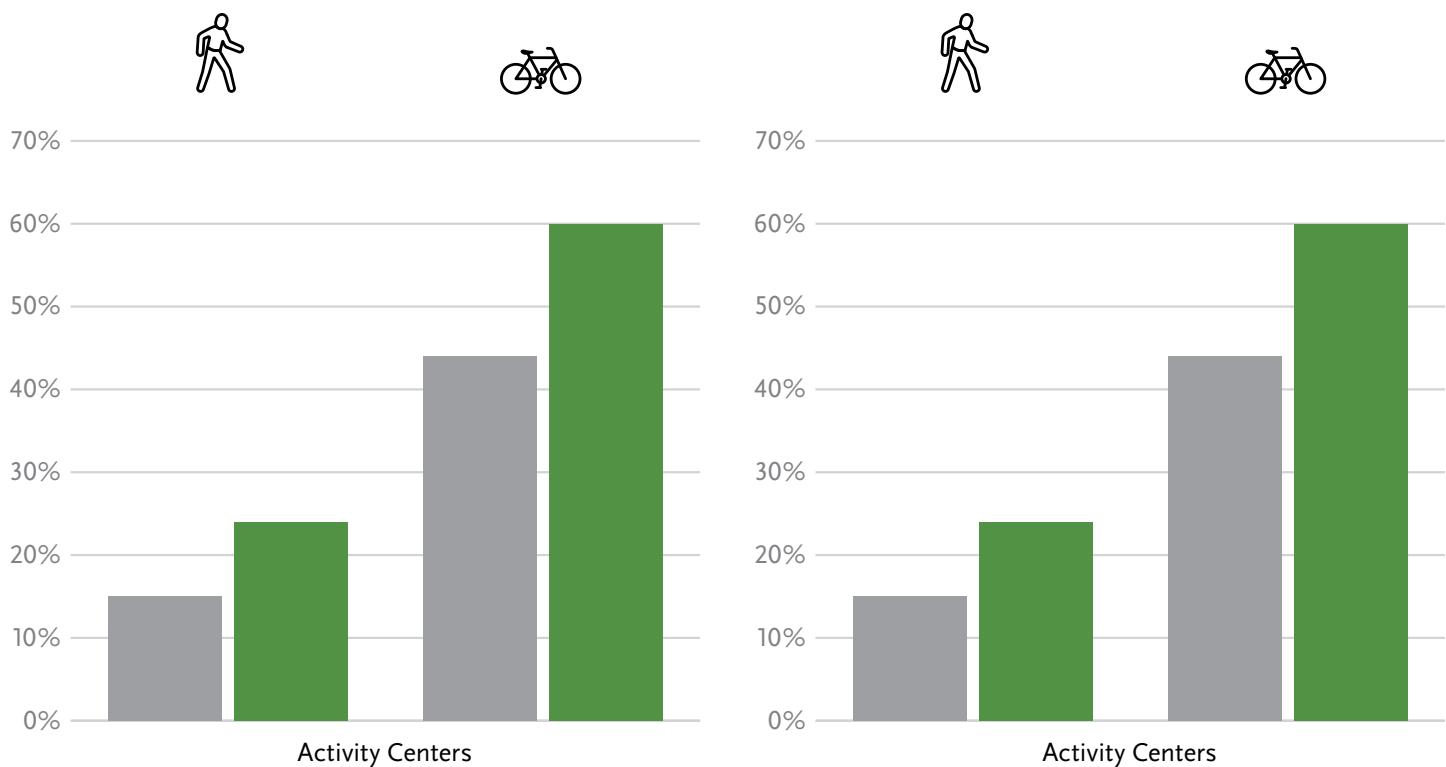
*A single year of employment for one individual

Transit should connect people to where they want and need to go. The 2020 LRTP will increase the number of jobs and activity centers within a 10-minute walk or roll of fixed guideway transit. For example, it will bring about a 50% increase in jobs accessible and 60% of activity centers within a 10-minute walk of a transit station.

 Future Trend (2047)
 With 2020 LRTP (2047)

Figure 25

Percent of Activity Centers and Jobs within a 10-minute Walk or Roll of Fixed Guideway Transit



We're funding a transportation revolution, \$400 billion strong.

The 2020 LRTP provides the funding for the largest public works projects in North America, identifying \$400 billion to be spent on transportation over the 30-year period. The LRTP financial forecast includes revenue from local sales tax, state sources, federal programs and other sources. Approximately 74% of funding is controlled by Metro, either from federal and state programs or through locally generated revenues. LA County has passed four separate ½-cent transportation sales taxes over the past 40 years: Proposition A (1980), Proposition C (1990), Measure R (2008) and Measure M (2016).

Figure 26 highlights the estimated funding by use. This includes all funding for capital projects, operations and maintenance countywide, including funding sources that Metro does not control. Almost half of the expenditures are capital investments for transit, highway or multi-modal projects, including the subregional funding programs and Local Return allocated to cities. Investment in active transportation makes up about \$6.9 billion of the 30-year total, included primarily under the roadways program. Transit operations, both rail and bus, comprise more than one-quarter of the estimated future expenditures.

The LRTP is a financially constrained plan, which means our committed investments are programmed to match our anticipated funding. The forecast is based on estimated sales tax growth and existing project cost estimates. Future changes may present challenges that must be balanced within a constrained plan and updated or amended as appropriate. The financial model anticipates growth over the 30-year forecast and some economic disruptions; however, the LRTP is a living document which can be regularly updated as needed.

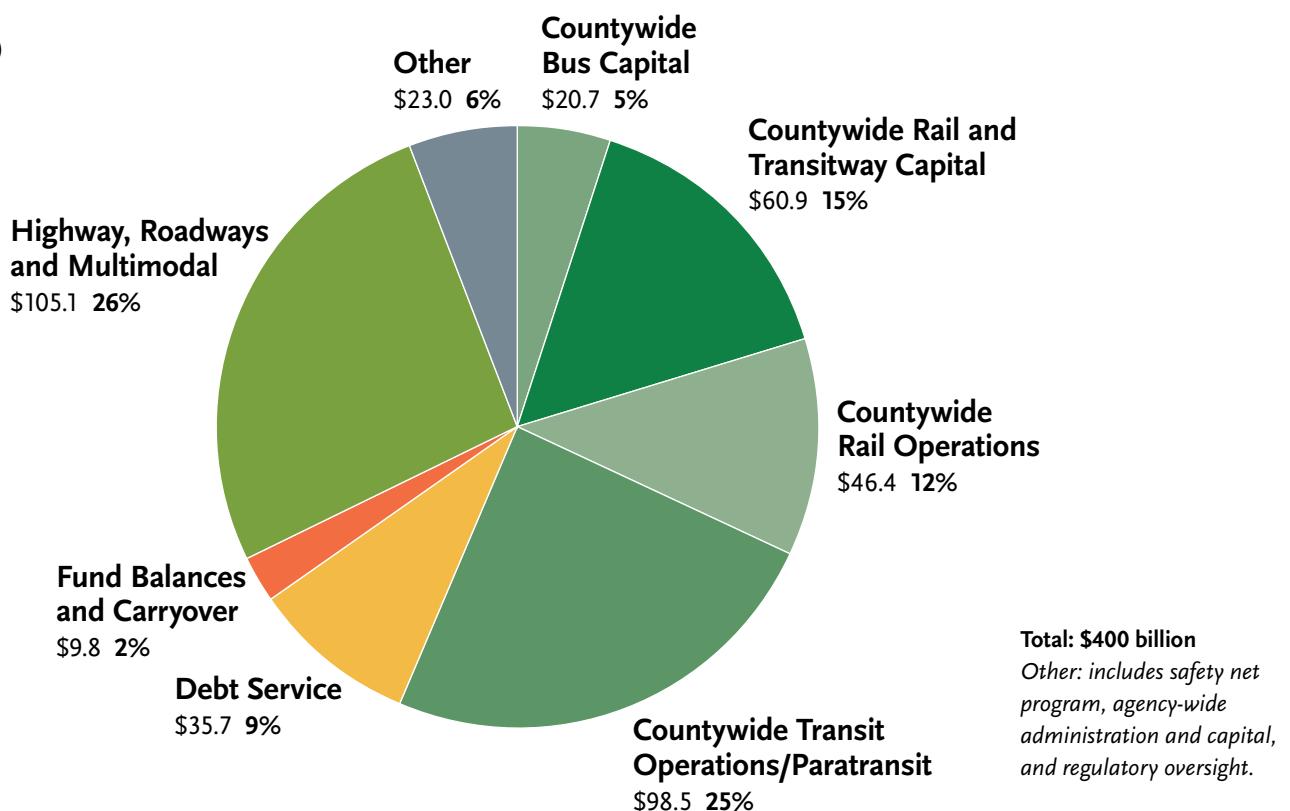
Almost half of all the funding is derived from LA County's four transportation sales tax measures. State programs, bolstered by the recent passage of SB 1 (the Road Repair & Accountability Act of 2017), make up about 20% of the projected funding. Local funding sources, including transit fare revenue, contribute 17% and federal sources, once a large share of local transportation funding, is only 8% of the future funding.

While the expanded programs, partnerships and policies of the 2020 LRTP represent additional expenditures, these will be balanced by future revenues anticipated through future policies, such as ExpressLanes and congestion pricing.

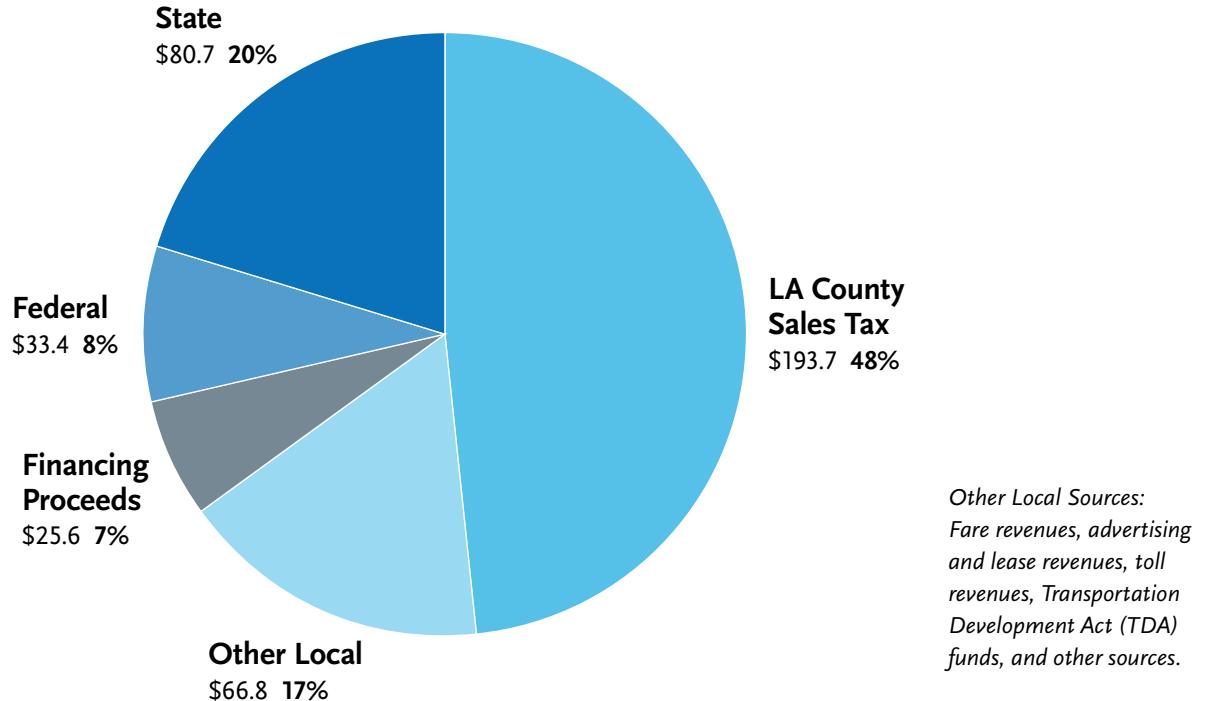
Figure 26

Countywide Uses and Sources of Transportation Funding (FY2021–FY2050)**Total Uses**

\$ in billions (YOE)

**Total Sources**

\$ in billions (YOE)



Supporting Our Partners

Metro, as the Regional Transportation Planning Agency, is the recipient agency for many state and federal funding programs that pass through to local jurisdictions. Furthermore, Metro administers the revenue from the four LA County transportation sales taxes, each providing substantial transportation funding for local jurisdictions.

Local Return

Local jurisdictions receive transportation funding from Metro through the Local Return program. Over the 30-year period, this amount is anticipated to be \$38 billion. The Local Return program is funded by each of the four sales taxes authorized by Metro, including 25% of Proposition A, 20% of Proposition C revenue, 15% of Measure R and 17% of Measure M (increasing to 20% in 2039).

The largest percentage of local return funding goes to support for local public transit and dial-a-ride services. Prop A required all funding be used for public transit; Prop C expanded the eligible uses of funding, but funded projects must demonstrate a public transit benefit or be performed on streets heavily used by public transit. Measures R and M expanded eligibility to most transportation purposes, and therefore, a large portion of local return funds are dedicated to active transportation projects, street resurfacing or other roadway improvements.



Measure M Multi-year Subregional Programs

Measure M created 36 Multi-year Subregional Programs (MSP) that program \$13.5 billion to the nine subregions in LA County. These MSPs were created with input from the subregions and highlight the transportation priorities of various communities throughout LA County. Some subregions also dedicated resources to specific highway and transit projects included in the expenditure plan. The majority of the future MSP funding is allocated to roadway projects (56%) and a substantial amount is allocated to active transportation (23%) and transit (15%).

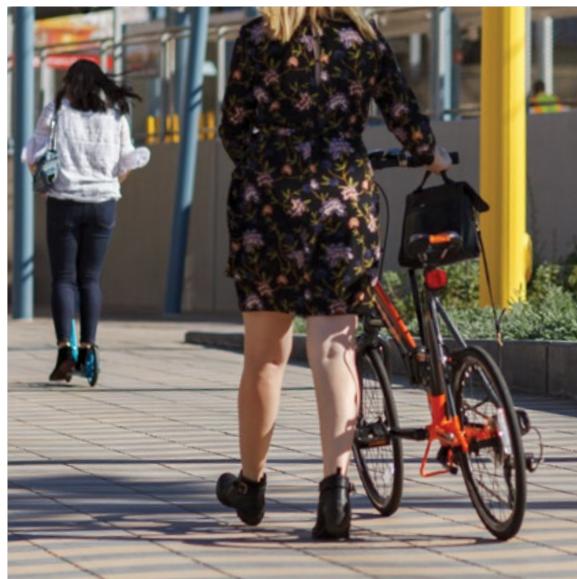


Figure 27

Local Return Funding

\$ in billions (YOE)

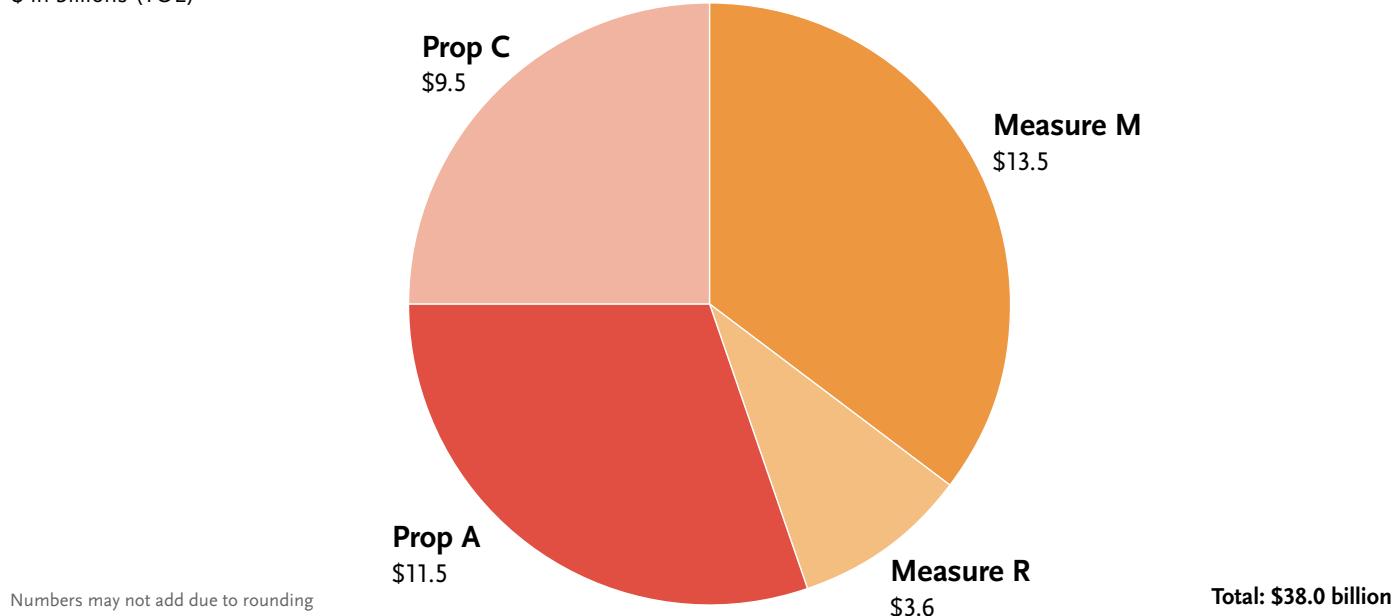
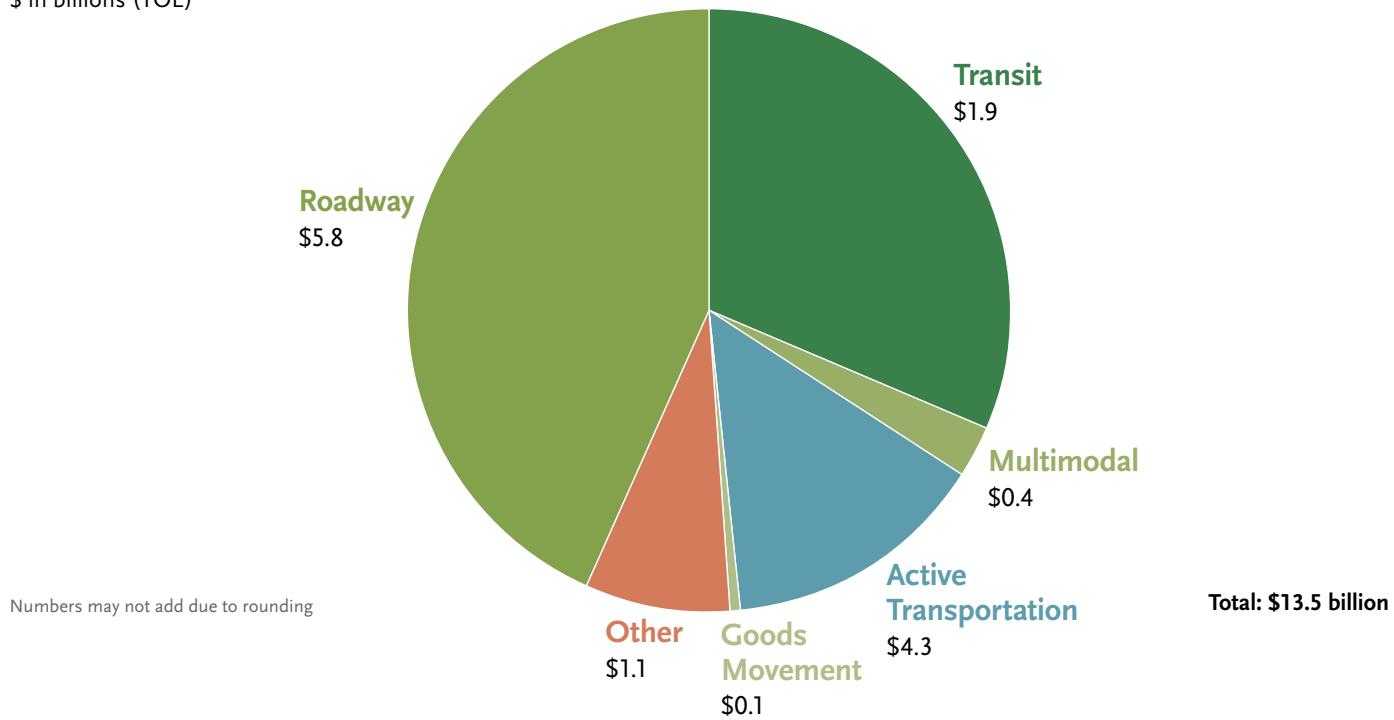


Figure 28

Multi-year Subregional Program Funding

\$ in billions (YOE)



Operations & Maintenance

A functioning, high-quality transportation system is essential for the efficiency of the system and the safety of users. The cost to operate and maintain LA County's transportation system is substantial, and we must continue to invest the resources to operate, maintain and rehabilitate the transportation system, including the expanding transit system and the vast network of roadways, and bicycle and pedestrian facilities.

The 30-year estimate for operations and maintenance included in the 2020 LRTP is over one-half of the 30-year investment estimate, with an estimated \$169 billion in transit operations and state of good repair (SGR), and \$32 billion in freeway operations and SGR.

Transit Operations and State of Good Repair (SGR)

LA County has almost 50 transit agencies that own more than 7,000 revenue vehicles, plus additional service vehicles, equipment and facilities. Metro bus and rail operations will require an investment of almost \$97 billion over the 30-year period, and an additional \$24 billion to rehabilitate and repair the assets. Municipal and local agency operations will require an additional \$33 billion.

Metrolink

The Metrolink system provides high-speed, long-distance regional commuter rail service over 538 route-miles, carrying an average of 38,000 weekday passenger trips. Metrolink is governed by the Southern California Regional Rail Authority (SCRRA), a joint powers authority representing the transportation commissions of Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties. LA County, through Metro, provides an operating subsidy for Metrolink. Over the 30-year period, the 2020 LRTP financial plan assumes Metrolink funding amounts totaling over \$800 million in state of good repair, \$6.7 billion in operations and \$1.3 billion in capital expansion.

Access Services

Metro provides funding for countywide paratransit service for the elderly and people with disabilities, operated by Access Services. A flexible service paratransit is a federally mandated right through the Americans with Disabilities Act (ADA) for persons with disabilities who cannot access fixed-route buses and trains. Paratransit, typically provided in vans or mini-buses, is on-demand and does not follow fixed routes or schedules. A total of \$8.5 billion will be needed to operate paratransit over the 30-year period.

Roadway Operations

Highway and arterial operations and maintenance include activities to keep roadways properly maintained, such as roadway resurfacing and bridge rehabilitation, as well as solutions to improve the operational efficiency of the system. Examples of these strategies include traveler information, intelligent transportation systems (ITS) and incident management solutions.

Transportation System Management (TSM) strategies are tools that use traffic engineering and operational measures to maximize capacity and reduce traffic delays on streets and highways. Intelligent Transportation Systems (ITS) strategies, such as the Regional Integration of ITS (RIITS) program, are low-cost and dramatically improve traffic flow, movement of vehicles and goods, system reliability, air quality, and safety.

Freeway Service Patrol (FSP) is a congestion mitigation program managed in partnership with Metro, California Highway Patrol (CHP) and Caltrans on all major freeways in LA County and is the largest of its kind in the nation, performing approximately 25,000 assists each month. The program utilizes a fleet of patrolling tow and service trucks designed to quickly remove disabled passenger vehicles and freight trucks.

Roadway State of Good Repair

The State Highway Operations and Protection Program (SHOPP) is a Caltrans program to rehabilitate California's highway system. The program identifies and approves funding for projects consistent with California's Transportation Asset Management Plan. Over a 30-year period, the estimated funding available in LA County through the SHOPP program is close to \$22 billion. Local roadway rehabilitation is funded in large part by the Local Return program, described above.

Figure 29

Transit Operations and SGR

\$ in billions (YOE)

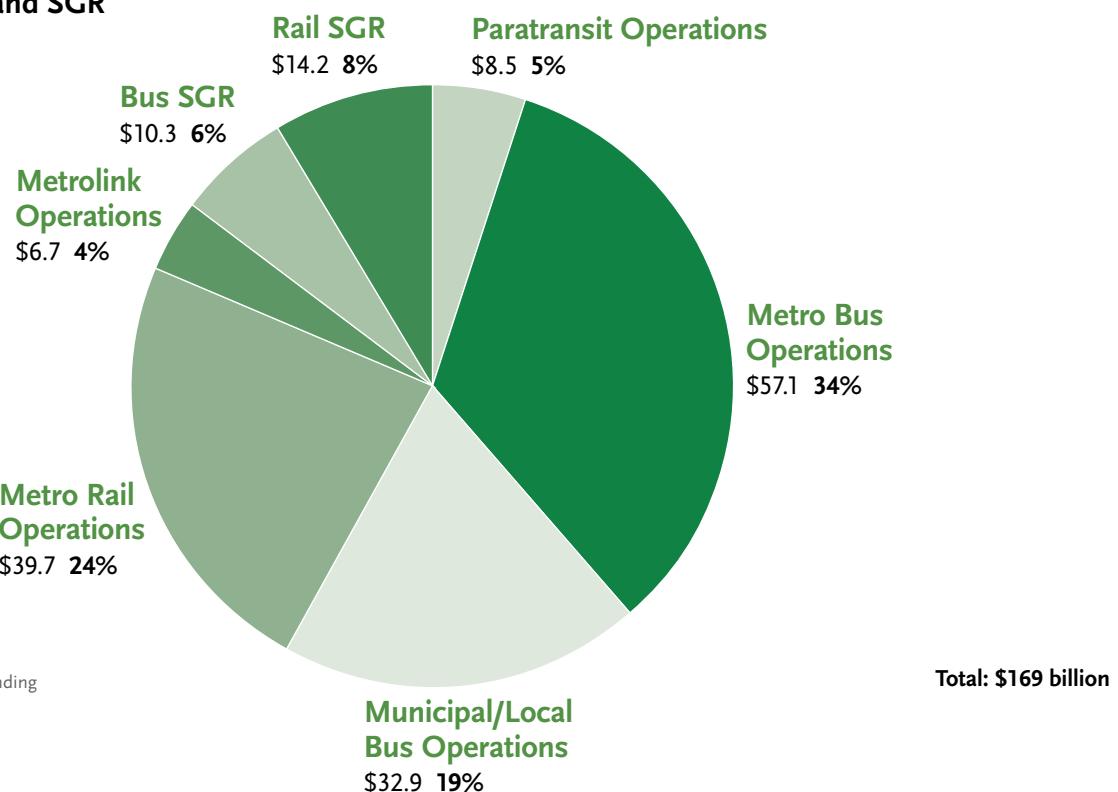
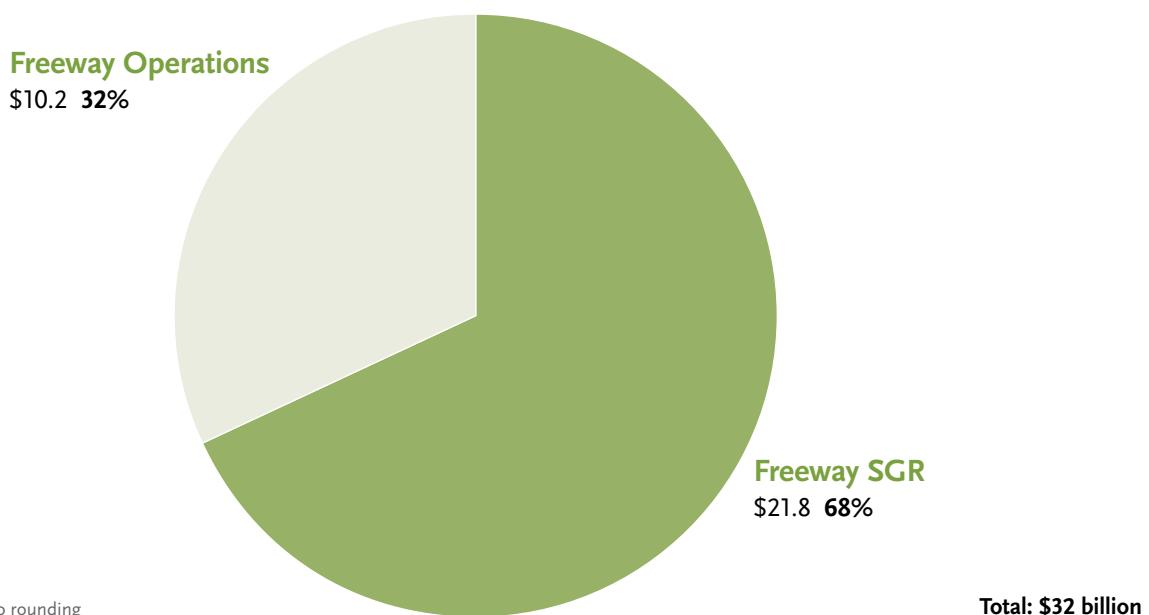


Figure 30

Freeway Operations and SGR

\$ in billions (YOE)



We're also building bold new programs and policies.

The preceding investment plan is the backbone of the LRTP, highlighting LA County's commitment to expanding transit, maintaining the transportation system, and facilitating the movement of people and goods. However, this investment alone will not address the challenges facing our region. LA County must support the capital program by advancing additional policies and programs to catalyze the investment and bring about the transportation system benefits that are needed for the region, without creating additional financial burdens. To this end, Metro must provide more and better transportation options, and incentivize transit and active travel modes.

Provide More and Better Transportation Options

Better transportation options mean providing multiple viable transportation choices that meet the needs of travelers with different requirements, desires and means. Solutions include:

- > **Complete the ExpressLanes Strategic Network.** Completing the Tier 1, Tier 2 and Tier 3 ExpressLanes network (see page 43) would add high-occupancy toll lanes to the majority of LA County freeways. ExpressLanes free up capacity on general purpose lanes, generate revenues and offer a faster, more reliable trip for those who carpool or who are willing to pay the toll.
- > **Improve bus speeds.** Improving transit travel times is crucial to making transit competitive with driving private automobiles. To improve speeds, Metro is implementing transit priority initiatives and bus speed improvement projects, such as all-door boarding, making fare payment easier, bus stop optimization, signal synchronization and transit signal priority. However, to truly make transit competitive and realize the goals in Vision 2028, the NextGen Bus Plan must implement a network of bus rapid transit routes and bus-only lanes. This will require a commitment and strong partnership with local cities to dedicate roadway space to transit.
- > **Promote Trip Reduction Strategies.** Providing meaningful travel choices means that Metro must continue to provide and support travel solutions that align with our current and future priorities. Metro recognizes that telecommuting has grown steadily over the past decade and that COVID-19 has dramatically accelerated that trend. An increase in delivery services and virtual engagement practices also have reduced the need for personal travel. We will continue to collaborate with our local partners to support trip reduction benefits and opportunities, as part of our efforts to manage travel demand, reduce the number of SOV trips, and provide new transportation options.

Incentivize Transit and Active Travel Modes

Incentivizing transit and active transportation requires policies that make these modes more attractive compared to driving a private automobile. Solutions include:

> **Explore implementation of pilot traffic reduction program.**

As part of a pilot program to improve mobility in a congested area of LA County, Metro is exploring congestion pricing strategies coupled with a package of transportation improvements with the goals of providing more travel options, improving equity, and increasing environmental benefits. Metro will work with our partners to implement a pricing program that meets our mobility goals while balancing equity and economic concerns.

> **Provide more affordable transit.** Decreasing transit fares can potentially boost transit ridership. In order to meet our transit ridership goals, Metro must expand our reduced fare programs and make fare payment easier. Metro will assess current and new pricing models to develop a simplified, fiscally sustainable, system-wide approach to pricing that addresses affordability concerns for low-income and disadvantaged populations, while also providing better mobility and security for all users across Metro's portfolio of transportation services.

> **Expand first/last mile connectivity.** Metro will work with local and regional partners to improve access to transit by removing barriers to transit stations or destinations. We will collaborate with our partner agencies to dramatically increase the regional network of active transportation facilities, including shared-use paths and on-street bikeways, and develop a funding strategy to get them built.

> **Support transit-oriented communities.** We will implement a comprehensive approach to facilitating development on Metro-owned land around high-quality transit stations and will quantify the impact of these developments within a one to one-and-a-half-mile radius in the transit corridor. Metro will develop programs and processes, new policies and special projects that reflect Metro's commitment to realizing holistic, inclusive community development and land use planning along existing and proposed transit corridors. This effort disseminates a vast array of TOC initiatives along with lessons learned for Metro, its external partners and peer transit agencies.



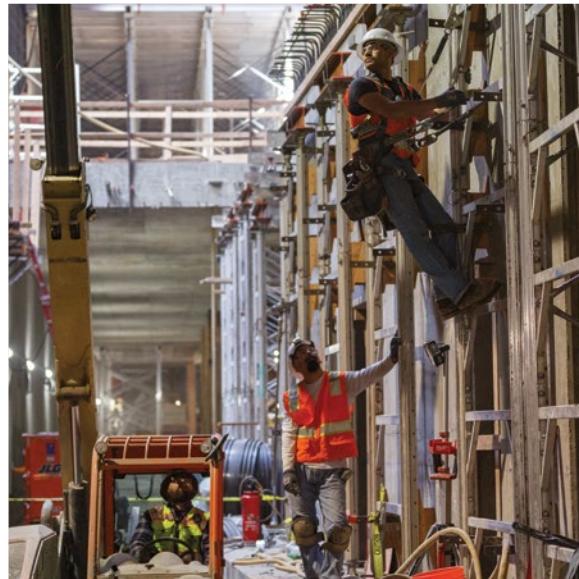
Plans for today, and the decades to come.

The 2020 LRTP is a financially constrained plan that examines how Metro's future transportation investments can be leveraged to achieve the maximum mobility benefits for all of LA County. It is the culmination of two years of sustained community engagement to establish stakeholder priorities, as well as technical analysis to determine the anticipated benefits of the LRTP over the next 30 years.

Building transportation infrastructure creates economic benefits. The jobs, spending, and increased access that these investments represent are needed now, more than ever. Our challenge is to proceed systematically, prioritizing strategies within this plan. The prioritization of Metro's infrastructure investments is the next step, which will be firmly rooted in equity and sustainability.

Metro's forthcoming Short Range Transportation Plan (SRTP) is a 10-year action plan for the investments, policies, and system improvements needed to advance the 2020 LRTP. The SRTP will acknowledge and analyze the region's new travel patterns and address regional economic recovery and resilience, while continuing to improve regional mobility, air quality, social justice and the advancement of equity. The SRTP will focus on achieving these outcomes through the transparent development of a fiscally responsible action plan that recognizes the near-term system improvements necessary to ensure maximum return on our transportation investments.

As part of the SRTP development Metro will create a strategic project list to include ideas for additional improvements through partnership priorities. The strategic project list will build upon the Mobility Matrix process previously established as part of Measure M, and other partner initiatives, to ensure a continuum of community-based ideas, evaluated against evolving regional needs. Essential to the development of a strategic project list will be analysis of equity impacts and sustainability benefits. Strategic projects do not require funding plans, but they will require statements about their overall benefits and future financial requirements. The SRTP will identify future programming capacity of anticipated resources within the SRTP timeline and beyond.





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